MITSUBISHI

GRAPHIC OPERATION TERMINAL
GOT

GRAPHIC OPERATION TERMINAL

GOT1000

GT16 User's Manual (Basic Utility)

● SAFETY PRECAUTIONS ●

(Always read these precautions before using this equipment.)

Before using this product, please read this manual and the relevant manuals introduced in this manual carefully and pay full attention to safety to handle the product correctly.
The precautions given in this manual are concerned with this product.
In this manual, the safety precautions are ranked as "WARNING" and "CAUTION".

⚠ WARNING	Indicates that incorrect handling may cause hazardous conditions, resulting in death or severe injury.
⚠ CAUTION	CAUTION Indicates that incorrect handling may cause hazardous conditions, resulting in minor or moderate injury or property damage.

Note that the ⚠caution level may lead to a serious accident according to the circumstances. Always follow the instructions of both levels because they are important to personal safety.

Please save this manual to make it accessible when required and always forward it to the end user.

[DESIGN PRECAUTIONS]

⚠ WARNING

- Some failures of the GOT, communication unit or cable may keep the outputs on or off.
  An external monitoring circuit should be provided to check for output signals which may lead to a serious accident.
  Not doing so can cause an accident due to false output or malfunction.
- If a communication fault (including cable disconnection) occurs during monitoring on the GOT, communication between the GOT and PLC CPU is suspended and the GOT becomes inoperative.
  For bus connection: The CPU becomes faulty and the GOT becomes inoperative.
  For other than bus connection: The GOT becomes inoperative.
  A system where the GOT is used should be configured to perform any significant operation to the system by using the switches of a device other than the GOT on the assumption that a GOT communication fault will occur.
  Not doing so can cause an accident due to false output or malfunction.
- Do not use the GOT as the warning device that may cause a serious accident.
  An independent and redundant hardware or mechanical interlock is required to configure the device that displays and outputs serious warning.
  Failure to observe this instruction may result in an accident due to incorrect output or malfunction.

[DESIGN PRECAUTIONS]

⚠WARNING

- Incorrect operation of the touch switch(s) may lead to a serious accident if the GOT backlight is gone out.
  When the GOT backlight goes out, although the POWER LED blinks (green/orange) and the display section dims, the input of the touch switch(s) remains active.
  This may confuse an operator in thinking that the GOT is in "screensaver" mode, who then tries to release the GOT from this mode by touching the display section, which may cause a touch switch to operate.
  Note that the following occurs on the GOT when the backlight goes out.
  - GT1655-V: The POWER LED blinks (green/orange) and the monitor screen appears blank.
  - Models other than GT1655-V: The POWER LED blinks (green/orange) and the monitor screen appears dimmed.
- The display section of the GT16 is an analog-resistive type touch panel.
  If you touch the display section simultaneously in 2 points or more, the switch that is located around the center of the touched point, if any, may operate.
  Do not touch the display section in 2 points or more simultaneously.
  Doing so may cause an accident due to incorrect output or malfunction.
- When programs or parameters of the controller (such as a PLC) that is monitored by the GOT are changed,be sure to reset the GOT or shut off the power of the GOT at the same time.
  Not doing so can cause an accident due to false output or malfunction.

⚠CAUTION

- Do not bundle the control and communication cables with main-circuit, power or other wiring.
  Run the above cables separately from such wiring and keep them a minimum of 100mm (3.94in.) apart.Not doing so noise can cause a malfunction.
- Do not press the GOT display section with a pointed material as a pen or driver.
  Doing so can result in a damage or failure of the display section.
- When the GOT is connected to the Ethernet network, the available IP address is restricted according to the system configuration.
  - When multiple GOTs are connected to the Ethernet network :
    Do not set the IP address (192.168.0.18) for the GOTs and the controllers in the network.
  - When a single GOT is connected to the Ethernet network :
    Do not set the IP address (192.168.0.18) for the controllers except the GOT in the network.

  Doing so can cause the IP address duplication. The duplication can negatively affect the communication of the device with the IP address (192.168.0.18).
  The operation at the IP address duplication depends on the devices and the system.
- Turn on the controllers and the network devices to be ready for communication before they communicate with the GOT.
  Failure to do so can cause a communication error on the GOT.

[MOUNTING PRECAUTIONS]

⚠WARNING

- Be sure to shut off all phases of the external power supply used by the system before mounting or removing the GOT main unit to/from the panel.
  Not doing so can cause the unit to fail or malfunction.
- Be sure to shut off all phases of the external power supply used by the system before mounting or removing the communication unit, printer unit or option function board onto/from the GOT.
  Not doing so can cause the unit to fail or malfunction.
- When installing the option function board, wear an earth band etc. to avoid the static electricity.
  Not doing so can cause a unit corruption.

⚠CAUTION

- Use the GOT in the environment that satisfies the general specifications described in this manual.
  Not doing so can cause an electric shock, fire, malfunction or product damage or deterioration.
- When mounting the GOT to the control panel, tighten the mounting screws in the specified torque range.
  Undertightening can cause the GOT to drop, short circuit or malfunction.
  Overtightening can cause a drop, short circuit or malfunction due to the damage of the screws or the GOT.
- When loading the communication unit or printer unit to the GOT, fit it to the extension interface of the GOT and tighten the mounting screws in the specified torque range.
  Undertightening can cause the GOT to drop, short circuit or malfunction.
  Overtightening can cause a drop, failure or malfunction due to the damage of the screws or unit.
- When mounting the option function board onto the GOT, connect it to the corresponding connector securely and tighten the mounting screws within the specified torque range.
  Undertightening can cause malfunction due to poor contact.
  Overtightening can cause malfunction due to screw or unit damage.
- When inserting a CF card into the GOT, push it into the CF card interface of GOT until the CF card eject button will pop out.
  If not properly inserted, a bad connection may cause a malfunction.
- When inserting/removing a CF card into/from the GOT, turn the CF card access switch off in advance.
  Failure to do so may corrupt data within the CF card.
- When removing a CF card from the GOT, make sure to support the CF card by hand, as it may pop out.
  Failure to do so may cause the CF card to drop from the GOT and break.
- When installing a USB memory to the GOT, make sure to install the USB memory to the USB interface firmly.
  Failure to do so may cause a malfunction due to poor contact.

[MOUNTING PRECAUTIONS]

⚠CAUTION

- Before removing the USB memory from the GOT, operate the utility screen for removal. After the successful completion dialog box is displayed, remove the memory by hand carefully.
  Failure to do so may cause the USB memory to drop, resulting in a damage or failure of the memory.
- For closing the USB environmental protection cover, fix the cover by pushing the △ mark on the latch firmly to comply with the protective structure.
- Remove the protective film of the GOT.
  When the user continues using the GOT with the protective film, the film may not be removed.
- Operate and store the GOT in environments without direct sunlight, high temperature, dust, humidity, and vibrations.
- When using the GOT in the environment of oil or chemicals, use the protective cover for oil.
  Failure to do so may cause failure or malfunction due to the oil or chemical entering into the GOT.

[WIRING PRECAUTIONS]

⚠WARNING

- Be sure to shut off all phases of the external power supply used by the system before wiring.
  Failure to do so may result in an electric shock, product damage or malfunctions.

⚠CAUTION

- Always ground the FG terminal, LG terminal, and protective ground terminal of the GOT power to the protective ground conductors dedicated to the GOT.
  Not doing so may cause an electric shock or malfunction.
- Terminal screws which are not to be used must be tightened always at torque 0.5 to 0.8 N·m.
  Otherwise there will be a danger of short circuit against the solderless terminals.
- Use applicable solderless terminals and tighten them with the specified torque.
  If any solderless spade terminal is used, it may be disconnected when the terminal screw comes loose, resulting in failure.
- Correctly wire the GOT power supply section after confirming the rated voltage and terminal arrangement of the product.
  Not doing so can cause a fire or failure.
- Tighten the terminal screws of the GOT power supply section in the specified torque range.
  Undertightening can cause a short circuit or malfunction.
  Overtightening can cause a short circuit or malfunction due to the damage of the screws or the GOT.
- Exercise care to avoid foreign matter such as chips and wire offcuts entering the GOT. Not doing so can cause a fire, failure or malfunction.

[WIRING PRECAUTIONS]

⚠CAUTION

- The module has an ingress prevention label on its top to prevent foreign matter, such as wire offcuts, from entering the module during wiring.
  Do not peel this label during wiring.
  Before starting system operation, be sure to peel this label because of heat dissipation.
- Plug the communication cable into the connector of the connected unit and tighten the mounting and terminal screws in the specified torque range.
  Undertightening can cause a short circuit or malfunction.
  Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.
- Plug the QnA/ACPU/Motion controller (A series) bus connection cable by inserting it into the connector of the connected unit until it "clicks".
  After plugging, check that it has been inserted snugly.
  Not doing so can cause a malfunction due to a contact fault.

[TEST OPERATION PRECAUTIONS]

⚠WARNING

- Before performing the test operations of the user creation monitor screen (such as turning ON or OFF bit device, changing the word device current value, changing the settings or current values of the timer or counter, and changing the buffer memory current value), read through the manual carefully and make yourself familiar with the operation method.
  During test operation, never change the data of the devices which are used to perform significant operation for the system.
  False output or malfunction can cause an accident.

[STARTUP/MAINTENANCE PRECAUTIONS]

⚠WARNING

- When power is on, do not touch the terminals.
  Doing so can cause an electric shock or malfunction.
- Correctly connect the battery connector.
  Do not charge, disassemble, heat, short-circuit, solder, or throw the battery into the fire.
  Doing so will cause the battery to produce heat, explode, or ignite, resulting in injuly and fire.
- Before starting cleaning or terminal screw retightening, always switch off the power externally in all phases.
  Not switching the power off in all phases can cause a unit failure or malfunction.
  Undertightening can cause a short circuit or malfunction.
  Overtightening can cause a short circuit or malfunction due to the damage of the screws or unit.

[STARTUP/MAINTENANCE PRECAUTIONS]

⚠CAUTION

- Do not disassemble or modify this unit.
  Doing so can cause a failure, malfunction, injury, or fire.
- Do not touch the conductive and electronic parts of the unit directly.
  Doing so can cause a unit malfunction or failure.
- The cables connected to the unit must be run in ducts or clamped.
  Not doing so can cause the unit or cable to be damaged due to the dangling, motion or accidental pulling of the cables or can cause a malfunction due to a cable connection fault.
- When unplugging the cable connected to the unit, do not hold and pull the cable portion.
  Doing so can cause the unit or cable to be damaged or can cause a malfunction due to a cable connection fault.
- Do not drop the module or subject it to strong shock.
  A module damage may result.
- Do not drop or give an impact to the battery mounted to the unit.
  Doing so may damage the battery, causing the battery fluid to leak inside the battery.
  If the battery is dropped or given an impact, dispose of it without using.
- Before touching the unit, always touch grounded metal, etc. to discharge static electricity from human body, etc.
  Not doing so can cause the unit to fail or malfunction.
- Before touching the unit, always touch grounded metal, etc. to discharge static electricity from human body, etc.
  Not doing so can cause the unit to fail or malfunction.
- Replace battery with GT15-BAT or GT11-50BAT by Mitsubishi electric Co. only.
  Use of another battery may present a risk of fire or explosion.
- Dispose of used battery promptly.
  Keep away from children. Do not disassemble and do not dispose of in fire.

[TOUCH PANEL PRECAUTIONS]

⚠CAUTION

- For the analog-resistive film type touch panels, normally the adjustment is not required.
  However, the difference between a touched position and the object position may occur as the period of use elapses.
  When any difference between a touched position and the object position occurs, execute the touch panel calibration.
- When any difference between a touched position and the object position occurs, other object may be activated.
  This may cause an unexpected operation due to incorrect output or malfunction.

[BACKLIGHT REPLACEMENT PRECAUTIONS]

⚠WARNING

- Be sure to shut off all phases of the external power supply of the GOT (and the PLC CPU in the case of a bus topology) and remove the GOT from the control panel before replacing the backlight (when using the GOT with the backlight replaceable by the user).
  Not doing so can cause an electric shock.
  Replacing a backlight without removing the GOT from the control panel can cause the backlight to drop, resulting in an injury.

[BACKLIGHT REPLACEMENT PRECAUTIONS]

⚠CAUTION

- Wear gloves for the backlight replacement when using the GOT with the backlight replaceable by the user.
  Not doing so can cause an injury.
- Before replacing a backlight, allow 5 minutes or more after turning off the GOT when using the GOT with the backlight replaceable by the user.
  Not doing so can cause a burn from heat of the backlight.

[DISPOSAL PRECAUTIONS]

⚠CAUTION

- When disposing of this product, treat it as industrial waste.
  When disposing of batteries, separate them from other wastes according to the local regulations.
  (For details of the battery directive in EU member states, refer to (HardWare) ■Handling of Batteries and Devices with Built-in Batteries in EU Member States.)

[TRANSPORTATION PRECAUTIONS]

⚠CAUTION

- When transporting lithium batteries, make sure to treat them based on the transport regulations.
  (Refer to (HardWare) Appendix 3 for details of the regurated models.)
- Make sure to transport the GOT main unit and/or relevant unit(s) in the manner they will not be exposed to the impact exceeding the impact resistance described in the general specifications of this manual, as they are precision devices.
  Failure to do so may cause the unit to fail.
  Check if the unit operates correctly after transportation.

INTRODUCTION

Thank you for choosing the Mitsubishi Graphic Operation Terminal.
Before using the equipment, please read this manual carefully to use the equipment to its optimum.

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REVISIONS

WARRANTY

ABOUT MANUALS

The following table lists the manual relevant to GT Designer2 product.
Refer to each manual for any purpose.

Manual Name	Packaging	Manual Number (Model code)
GT SoftGOT1000 Version2 Operating Manual	Stored in CD-ROM	SH-080602ENG (1D7M48)
GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT1000 Series)	Stored in CD-ROM	SH-080529ENG (1D7M24)
GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 1/3 GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 2/3 GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 3/3	Stored in CD-ROM	SH-080530ENG (1D7M25)
GOT1000 Series Connection Manual (1/3) GOT1000 Series Connection Manual (2/3) GOT1000 Series Connection Manual (3/3)	Stored in CD-ROM	SH-080532ENG (1D7M26)
GOT1000 Series Extended/Option Functions Manual	Stored in CD-ROM	SH-080544ENG (1D7M32)
GOT1000 Series Gateway Functions Manual	Stored in CD-ROM	SH-080545ENG (1D7M33)
GOT1000 Series MES Interface Function Manual	Stored in CD-ROM	SH-080654ENG (1D7M63)

The following table lists the manual relevant to GT Works3 product.
Refer to each manual for any purpose.

■ Screen creation software manuals

Manual Name	Packaging	Manual Number (Model code)
GT Works3 Version1 Installation Procedure Manual	Enclosed in product	-
GT Designer3 Version1 Screen Design Manual (Fundamentals) 1/2, 2/2	Stored in CD-ROM	SH-080866ENG (1D7MB9)
GT Designer3 Version1 Screen Design Manual (Functions) 1/2, 2/2	Stored in CD-ROM	SH-080867ENG (1D7MC1)
GT Simulator3 Version1 Operating Manual for GT Works3	Stored in CD-ROM	SH-080861ENG (1D7MB1)
GT Converter2 Version3 Operating Manual for GT Works3	Stored in CD-ROM	SH-080862ENG (1D7MB2)

■ Connection manuals

Manual Name	Packaging	Manual Number (Model code)
GOT1000 Series Connection Manual (Mitsubishi Products) for GT Works3	Stored in CD-ROM	SH-080868ENG (1D7MC2)
GOT1000 Series Connection Manual (Non-Mitsubishi Products 1) for GT Works3	Stored in CD-ROM	SH-080869ENG (1D7MC3)
GOT1000 Series Connection Manual (Non-Mitsubishi Products 2) for GT Works3	Stored in CD-ROM	SH-080870ENG (1D7MC4)
GOT1000 Series Connection Manual (Microcomputer, MODBUS Products, Peripherals) for GT Works3	Stored in CD-ROM	SH-080871ENG (1D7MC5)

■ Extended and option function manuals

Manual Name	Packaging	Manual Number (Model code)
GOT1000 Series Gateway Functions Manual for GT Works3	Stored in CD-ROM	SH-080858ENG (1D7MA7)
GOT1000 Series MES Interface Function Manual for GT Works3	Stored in CD-ROM	SH-080859ENG (1D7MA8)
GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3	Stored in CD-ROM	SH-080863ENG (1D7MB3)

■ GT SoftGOT1000 manuals

Manual Name	Packaging	Manual Number (Model code)
GT SoftGOT1000 Version3 Operating Manual for GT Works3	Stored in CD-ROM	SH-080860ENG (1D7MA9)

■ GT16 manuals

Manual Name	Packaging	Manual Number (Model code)
GT16 User's Manual (Hardware)	Stored in CD-ROM	SH-080928ENG (1D7MD3)
GT16 User's Manual (Basic Utility)	Stored in CD-ROM	SH-080929ENG (1D7MD4)
GT16 Handy GOT User's Manual	Stored in CD-ROM	JY997D41201 JY997D41202 (09R821)

■ GT15 manuals

Manual Name	Packaging	Manual Number (Model code)
GT15 User's Manual	Stored in CD-ROM	SH-080528ENG (1D7M23)

■ GT14 manuals

Manual Name	Packaging	Manual Number (Model code)
GT14 User's Manual	Stored in CD-ROM	JY997D44801 (09R823)

■ GT12 manuals

Manual Name	Packaging	Manual Number (Model code)
GT12 User's Manual	Stored in CD-ROM	SH-080977ENG (1D7ME1)

■ GT11 manuals

Manual Name	Packaging	Manual Number (Model code)
GT11 User's Manual	Stored in CD-ROM	JY997D17501 (09R815)
GT11 Handy GOT User's Manual	Stored in CD-ROM	JY997D20101 JY997D20102 (09R817)

■ GT10 manuals

Manual Name	Packaging	Manual Number (Model code)
GT10 User's Manual	Stored in CD-ROM	JY997D24701 (09R819)

QUICK REFERENCE

■ Creating a project

Obtaining the specifications and operation methods of GT Designer3	• GT Designer3 Version1 Screen Design Manual (Fundamentals) 1/2, 2/2 • GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT1000 Series)
Setting available functions on GT Designer3	
Creating a screen displayed on the GOT	
Obtaining useful functions to increase efficiency of drawing	
Setting details for figures and objects	• GT Designer3 Version1 Screen Design Manual (Functions) 1/2, 2/2 • GT Designer2 Version2 Screen Design Manual (For GOT1000 Series) 1/3, 2/3, 3/3
Setting functions for the data collection or trigger action	
Setting functions to use peripheral devices	
Simulating a created project on a personal computer	• GT Simulator3 Version1 Operating Manual for GT Works3 • GT Simulator2 Version2 Operating Manual

■ Connecting a controller to the GOT

Obtaining information of Mitsubishi products applicable to the GOT	• GOT1000 Series Connection Manual (Mitsubishi Products) for GT Works3 • GOT1000 Series Connection Manual 1/3, 2/3, 3/3
Connecting Mitsubishi products to the GOT	
Connecting multiple controllersto one GOT (Multi-channel function)	
Establishing communication between a personal computer and a controller via the GOT (FA transparent function)	
Obtaining information of Non-Mitsubishi products applicable to the GOT	• GOT1000 Series Connection Manual (Non-Mitsubishi Products 1) for GT Works3 • GOT1000 Series Connection Manual (Non-Mitsubishi Products 2) for GT Works3 • GOT1000 Series Connection Manual 1/3, 2/3, 3/3
Connecting Non-Mitsubishi products to the GOT	
Obtaining information of peripheral devices applicable to the GOT	• GOT1000 Series Connection Manual (Microcomputer, MODBUS Products, Peripherals) for GT Works3 • GOT1000 Series Connection Manual 1/3, 2/3, 3/3
Connecting peripheral devices including a barcode reader to the GOT	

■ Transferring data to the GOT

Writing data to the GOT	• GT Designer3 Version1 Screen Design Manual (Fundamentals) 1/2, 2/2 • GT Designer2 Version2 Basic Operation/Data Transfer Manual (For GOT1000 Series)
Reading data from the GOT	
Verifying a editing project to a GOT project	

■ Others

Obtaining specifications (including part names, external dimensions, and options) of each GOT	• GT16 User's Manual (Hardware) • GT16 Handy GOT User's Manual • GT15 User's Manual • GT14 User's Manual • GT12 User's Manual • GT11 User's Manual • GT11 Handy GOT User's Manual • GT10 User's Manual
Installing the GOT	
Operating the utility	• GT16 User's Manual (Basic Utility) • GT16 Handy GOT User's Manual • GT15 User's Manual • GT14 User's Manual • GT12 User's Manual • GT11 User's Manual • GT11 Handy GOT User's Manual • GT10 User's Manual
Configuring the gateway function	• GOT1000 Series Gateway Functions Manual for GT Works3 • GOT1000 Series Gateway Functions Manual
Configuring the MES interface function	• GOT1000 Series MES Interface Function Manual for GT Works3 • GOT1000 Series MES Interface Function Manual
Configuring the extended function and option function	• GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3 • GOT1000 Series Extended/Option Functions Manual
Using a personal computer as the GOT	• GT SoftGOT1000 Version3 Operating Manual for GT Works3 • GT SoftGOT1000 Version2 Operating Manual

ABBREVIATIONS AND GENERIC TERMS

■ GOT

Abbreviations and generic terms			Description
GOT1000 Series	GT1695	GT1695M-X	Abbreviation of GT1695M-XTBA, GT1695M-XTBD
	GT1685	GT1685M-S	Abbreviation of GT1685M-STBA, GT1685M-STBD
	GT1675	GT1675M-S	Abbreviation of GT1675M-STBA, GT1675M-STBD
		GT1675M-V	Abbreviation of GT1675M-VTBA, GT1675M-VTBD
		GT1675-VN	Abbreviation of GT1675-VNBA, GT1675-VNBD
	GT1672	GT1672-VN	Abbreviation of GT1672-VNBA, GT1672-VNBD
	GT1665	GT1665M-S	Abbreviation of GT1665M-STBA, GT1665M-STBD
		GT1665M-V	Abbreviation of GT1665M-VTBA, GT1665M-VTBD
	GT1662	GT1662-VN	Abbreviation of GT1662-VNBA, GT1662-VNBD
	GT1655	GT1655-V	Abbreviation of GT1655-VTBD
	GT16		Abbreviation of GT1695, GT1685, GT1675, GT1672, GT1665, GT1662, GT1655, GT16 Handy GOT
	GT1595	GT1595-X	Abbreviation of GT1595-XTBA, GT1595-XTBD
	GT1585	GT1585V-S	Abbreviation of GT1585V-STBA, GT1585V-STBD
		GT1585-S	Abbreviation of GT1585-STBA, GT1585-STBD
	GT157□	GT1575V-S	Abbreviation of GT1575V-STBA, GT1575V-STBD
		GT1575-S	Abbreviation of GT1575-STBA, GT1575-STBD
		GT1575-V	Abbreviation of GT1575-VTBA, GT1575-VTBD
		GT1575-VN	Abbreviation of GT1575-VNBA, GT1575-VNBD
		GT1572-VN	Abbreviation of GT1572-VNBA, GT1572-VNBD
	GT156□	GT1565-V	Abbreviation of GT1565-VTBA, GT1565-VTBD
		GT1562-VN	Abbreviation of GT1562-VNBA, GT1562-VNBD
	GT155□	GT1555-V	Abbreviation of GT1555-VTBD
		GT1555-Q	Abbreviation of GT1555-QTBD, GT1555-QSBD
		GT1550-Q	Abbreviation of GT1550-QLBD
	GT15		Abbreviation of GT1595, GT1585, GT157□, GT156□, GT155□
	GT145□	GT1455-Q	Abbreviation of GT1455-QTBDE, GT1455-QTBD
		GT1450-Q	Abbreviation of GT1450-QLBDE, GT1450-QLBD
	GT14		Abbreviation of GT1455-Q, GT1450-Q
	GT1275	GT1275-V	Abbreviation of GT1275-VNBA, GT1275-VNBD
	GT1265	GT1265-V	Abbreviation of GT1265-VNBA, GT1265-VNBD
	GT12		Abbreviation of GT1275, GT1265
	GT115□	GT1155-Q	Abbreviation of GT1155-QTBDQ, GT1155-QSBDQ, GT1155-QTBDA, GT1155-QSBDA, GT1155-QTBD, GT1155-QSBD
		GT1150-Q	Abbreviation of GT1150-QLBDQ, GT1150-QLBDA, GT1150-QLBD
	GT11		Abbreviation of GT115□, GT11 Handy GOT,
	GT105□	GT1055-Q	Abbreviation of GT1055-QSBD
		GT1050-Q	Abbreviation of GT1050-QBBD
	GT104□	GT1045-Q	Abbreviation of GT1045-QSBD
		GT1040-Q	Abbreviation of GT1040-QBBD
	GT1030		Abbreviation of GT1030-LBD, GT1030-LBD2, GT1030-LBL, GT1030-LBDW, GT1030-LBDW2, GT1030-LBLW, GT1030-LWD, GT1030-LWD2, GT1030-LWL, GT1030-LWDW, GT1030-LWDW2, GT1030-LWLW, GT1030-HBD, GT1030-HBD2, GT1030-HBL, GT1030-HBDW, GT1030-HBDW2, GT1030-HBLW, GT1030-HWD, GT1030-HWD2, GT1030-HWL, GT1030-HWDW, GT1030-HWDW2, GT1030-HWLW
	GT1020		Abbreviation of GT1020-LBD, GT1020-LBD2, GT1020-LBL, GT1020-LBDW, GT1020-LBDW2, GT1020-LBLW, GT1020-LWD, GT1020LWD2, GT1020-LWL, GT1020-LWDW, GT1020-LWDW2, GT1020-LWLW
	GT10		Abbreviation of GT105□, GT104□, GT1030, GT1020

Abbreviations and generic terms				Description
GOT1000 Series	Handy GOT	GT16 Handy GOT	GT1665HS-V	Abbreviation of GT1665HS-VTBD
		GT11 Handy GOT	GT1155HS-Q	Abbreviation of GT1155HS-QSBD
			GT1150HS-Q	Abbreviation of GT1150HS-QLBD
	GT SoftGOT1000			Abbreviation of GT SoftGOT1000
GOT900 Series				Abbreviation of GOT-A900 series, GOT-F900 series
GOT800 Series				Abbreviation of GOT-800 series

■ Communication unit

Abbreviations and generic terms	Description
Bus connection unit	GT15-QBUS, GT15-QBUS2, GT15-ABUS, GT15-ABUS2, GT15-75QBUSL, GT15-75QBUS2L, GT15-75ABUSL, GT15-75ABUS2L
Serial communication unit	GT15-RS2-9P, GT15-RS4-9S, GT15-RS4-TE
RS-422 conversion unit	GT15-RS2T4-9P, GT15-RS2T4-25P
Ethernet communication unit	GT15-J71E71-100
MELSECNET/H communication unit	GT15-J71LP23-25, GT15-J71BR13
MELSECNET/10 communication unit	GT15-75J71LP23-Z[*1], GT15-75J71BR13-Z[*2]
CC-Link IE Controller Network communication unit	GT15-J71GP23-SX
CC-Link IE Field Network communication unit	GT15-J71GF13-T2
CC-Link communication unit	GT15-J61BT13, GT15-75J61BT13-Z[*3]
Interface converter unit	GT15-75IF900
Serial multi-drop connection unit	GT01-RS4-M
Connection Conversion Adapter	GT10-9PT5S
RS-232/485 signal conversion adapter	GT14-RS2T4-9P

*1 A9GT-QJ71LP23 + GT15-75IF900 set
*2 A9GT-QJ71BR13 + GT15-75IF900 set
*3 A8GT-J61BT13 + GT15-75IF900 set

■ Option unit

Abbreviations and generic terms		Description
Printer unit		GT15-PRN
Video/RGB unit	Video input unit	GT16M-V4, GT15V-75V4
	RGB input unit	GT16M-R2, GT15V-75R1
	Video/RGB input unit	GT16M-V4R1, GT15V-75V4R1
	RGB output unit	GT16M-ROUT, GT15V-75ROUT
Multimedia unit		GT16M-MMR
CF card unit		GT15-CFCD
CF card extension unit[*1]		GT15-CFEX-C08SET
External I/O unit		GT15-DIO, GT15-DIOR
Sound output unit		GT15-SOUT

*1 GT15-CFEX + GT15-CFEXIF + GT15-C08CF set.

■ Option

Abbreviations and generic terms		Description	
Memory card	CF card	GT05-MEM-16MC, GT05-MEM-32MC, GT05-MEM-64MC, GT05-MEM-128MC, GT05-MEM-256MC, GT05-MEM-512MC, GT05-MEM-1GC, GT05-MEM-2GC, GT05-MEM-4GC, GT05-MEM-8GC, GT05-MEM-16GC	
	SD card	L1MEM-2GBSD, L1MEM-4GBSD	
Memory card adaptor		GT05-MEM-ADPC	
Option function board		GT16-MESB, GT15-FNB, GT15-QFNB, GT15-QFNB16M, GT15-QFNB32M, GT15-QFNB48M, GT11-50FNB, GT15-MESB48M	
Battery		GT15-BAT, GT11-50BAT	
Protective Sheet		For GT16	GT16-90PSCB, GT16-90PSGB, GT16-90PSCW, GT16-90PSGW, GT16-80PSCB, GT16-80PSGB, GT16-80PSCW, GT16-80PSGW, GT16-70PSCB, GT16-70PSGB, GT16-70PSCW, GT16-70PSGW, GT16-60PSCB, GT16-60PSGB, GT16-60PSCW, GT16-60PSGW, GT16-50PSCB, GT16-50PSGB, GT16-50PSCW, GT16-50PSGW, GT16-90PSCB-012, GT16-80PSCB-012, GT16-70PSCB-012, GT16-60PSCB-012, GT16-50PSCB-012, GT16H-60PSC
		For GT15	GT15-90PSCB, GT15-90PSGB, GT15-90PSCW, GT15-90PSGW, GT15-80PSCB, GT15-80PSGB, GT15-80PSCW, GT15-80PSGW, GT15-70PSCB, GT15-70PSGB, GT15-70PSCW, GT15-70PSGW, GT15-60PSCB, GT15-60PSGB, GT15-60PSCW, GT15-60PSGW, GT15-50PSCB, GT15-50PSGB, GT15-50PSCW, GT15-50PSGW
		For GT14	GT14-50PSCB, GT14-50PSGB, GT14-50PSCW, GT14-50PSGW
		For GT12	GT11-70PSCB, GT11-65PSCB
		For GT11	GT11-50PSCB, GT11-50PSGB, GT11-50PSCW, GT11-50PSGW, GT11H-50PSC
		For GT10	GT10-50PSCB, GT10-50PSGB, GT10-50PSCW, GT10-50PSGW, GT10-40PSCB, GT10-40PSGB, GT10-40PSCW, GT10-40PSGW, GT10-30PSCB, GT10-30PSGB, GT10-30PSCW, GT10-30PSGW, GT10-20PSCB, GT10-20PSGB, GT10-20PSCW, GT10-20PSGW
Protective cover for oil		GT05-90PCO, GT05-80PCO, GT05-70PCO, GT05-60PCO, GT05-50PCO, GT16-50PCO, GT10-40PCO, GT10-30PCO, GT10-20PCO	
USB environmental protection cover		GT16-UCOV, GT16-50UCOV, GT15-UCOV, GT14-50UCOV, GT11-50UCOV	
Stand		GT15-90STAND, GT15-80STAND, GT15-70STAND, A9GT-50STAND, GT05-50STAND	
Attachment		GT15-70ATT-98, GT15-70ATT-87, GT15-60ATT-97, GT15-60ATT-96, GT15-60ATT-87, GT15-60ATT-77, GT15-50ATT-95W, GT15-50ATT-85	
Backlight		GT16-90XLTT, GT16-80SLTT, GT16-70SLTT, GT16-70VLTT, GT16-70VLTTA, GT16-70VLTN, GT16-60SLTT, GT16-60VLTT, GT16-60VLTN, GT15-90XLTT, GT15-80SLTT, GT15-70SLTT, GT15-70VLTT, GT15-70VLTN, GT15-60VLTT, GT15-60VLTN	
Multi-color display board		GT15-XHNB, GT15-VHNB	
Connector conversion box		GT11H-CNB-37S, GT16H-CNB-42S	
Emergency stop sw guard cover		GT11H-50ESCOV, GT16H-60ESCOV	
Memory loader		GT10-LDR	
Memory board		GT10-50FMB	
Panel-mounted USB port extension		GT14-C10EXUSB-4S, GT10-C10EXUSB-5S	

■ Software

Abbreviations and generic terms	Description
GT Works3	Abbreviation of the SW□DNC-GTWK3-E and SW□DNC-GTWK3-EA
GT Designer3	Abbreviation of screen drawing software GT Designer3 for GOT1000 series
GT Simulator3	Abbreviation of screen simulator GT Simulator3 for GOT1000/GOT900 series
GT SoftGOT1000	Abbreviation of monitoring software GT SoftGOT1000
GT Converter2	Abbreviation of data conversion software GT Converter2 for GOT1000/GOT900 series
GT Designer2 Classic	Abbreviation of screen drawing software GT Designer2 Classic for GOT900 series
GT Designer2	Abbreviation of screen drawing software GT Designer2 for GOT1000/GOT900 series
iQ Works	Abbreviation of iQ Platform compatible engineering environment MELSOFT iQ Works
MELSOFT Navigator	Generic term for integrated development environment software included in the SW□DNC-IQWK (iQ Platform compatible engineering environment MELSOFT iQ Works)
GX Works2	Abbreviation of SW□DNC-GXW2-E and SW□DNC-GXW2-EA type programmable controller engineering software
GX Simulator2	Abbreviation of GX Works2 with the simulation function
GX Simulator	Abbreviation of SW□D5C-LLT-E(-EV) type ladder logic test tool function software packages (SW5D5C-LLT (-EV) or later versions)
GX Developer	Abbreviation of SW□D5C-GPPW-E(-EV)/SW D5F-GPPW-E type software package
GX LogViewer	Abbreviation of SW□DNN-VIEWER-E type software package
PX Developer	Abbreviation of SW□D5C-FBDQ-E type FBD software package for process control
MT Works2	Abbreviation of motion controller engineering environment MELSOFT MT Works2 (SW□DNC-MTW2-E)
MT Developer	Abbreviation of SW□RNC-GSV type integrated start-up support software for motion controller Q series
MR Configurator2	Abbreviation of SW□DNC-MRC2-E type Servo Configuration Software
MR Configurator	Abbreviation of MRZJW□-SETUP□E type Servo Configuration Software
FR Configurator	Abbreviation of Inverter Setup Software (FR-SW□-SETUP-WE)
NC Configurator	Abbreviation of CNC parameter setting support tool NC Configurator
FX Configurator-FP	Abbreviation of parameter setting, monitoring, and testing software packages for FX3U-20SSC-H (SW□D5C-FXSSC-E)
FX3U-ENET-L Configuration tool	Abbreviation of FX3U-ENET-L type Ethernet module setting software (SW1D5-FXENETL-E)
RT ToolBox2	Abbreviation of robot program creation software (3D-11C-WINE)
MX Component	Abbreviation of MX Component Version□ (SW□D5C-ACT-E, SW□D5C-ACT-EA)
MX Sheet	Abbreviation of MX Sheet Version□ (SW□D5C-SHEET-E, SW□D5C-SHEET-EA)
LCPU Logging Configuration Tool	Abbreviation of LCPU Logging Configuration Tool (SW1DNN-LLUTL-E)

■ License key (for GT SoftGOT1000)

Abbreviations and generic terms	Description
License	GT15-SGTKEY-U, GT15-SGTKEY-P

■ License key (for GT SoftGOT2)

Abbreviations and generic terms	Description
License key	A9GTSOFT-LKEY-P (For DOS/V PC)
License key FD	SW5D5F-SGLKEY-J (For PC CPU module)

■ Others

Abbreviations and generic terms	Description
IAI	Abbreviation of IAI Corporation
AZBIL	Abbreviation of Azbil Corporation (former Yamatake Corporation)
OMRON	Abbreviation of OMRON Corporation
KEYENCE	Abbreviation of KEYENCE CORPORATION
KOYO EI	Abbreviation of KOYO ELECTRONICS INDUSTRIES CO., LTD.
SHARP	Abbreviation of Sharp Manufacturing Systems Corporation
JTEKT	Abbreviation of JTEKT Corporation
SHINKO	Abbreviation of Shinko Technos Co., Ltd.
CHINO	Abbreviation of CHINO CORPORATION
TOSHIBA	Abbreviation of TOSHIBA CORPORATION
TOSHIBA MACHINE	Abbreviation of TOSHIBA MACHINE CO., LTD.
HITACHI IES	Abbreviation of Hitachi Industrial Equipment Systems Co., Ltd.
HITACHI	Abbreviation of Hitachi, Ltd.
FUJI FA	Abbreviation of Fuji Electric FA Components & Systems Co., Ltd.
PANASONIC	Abbreviation of Panasonic Corporation
FUJI SYS	Abbreviation of Fuji Electric Systems Co., Ltd.
YASKAWA	Abbreviation of YASKAWA Electric Corporation
YOKOGAWA	Abbreviation of Yokogawa Electric Corporation
ALLEN-BRADLEY	Abbreviation of Allen-Bradley products manufactured by Rockwell Automation, Inc.
GE FANUC	Abbreviation of GE Fanuc Automation Corporation GE Fanuc Automation Corporation
LS IS	Abbreviation of LS Industrial Systems Co., Ltd.
SCHNEIDER	Abbreviation of Schneider Electric SA
SICK	Abbreviation of SICK AG
SIEMENS	Abbreviation of Siemens AG
RKC	Abbreviation of RKC INSTRUMENT INC.
HIRATA	Abbreviation of Hirata Corporation
MURATEC	Abbreviation of Muratec products manufactured by Muratec Automation Co., Ltd.
PLC	Abbreviation of programmable controller
Temperature controller	Generic term for temperature controller manufactured by each corporation
Indicating controller	Generic term for indicating controller manufactured by each corporation
Control equipment	Generic term for control equipment manufactured by each corporation
CHINO controller	Abbreviation of indicating controller manufactured by CHINO CORPORATION
PC CPU module	Abbreviation of PC CPU Unit manufactured by CONTEC CO., LTD
GOT (server)	Abbreviation of GOTs that use the server function
GOT (client)	Abbreviation of GOTs that use the client function
Windows® font	Abbreviation of TrueType font and OpenType font available for Windows® (Differs from the True Type fonts settable with GT Designer3 or GT Designer2)
Intelligent function module	Indicates the modules other than the PLC CPU, power supply module and I/O module that are mounted to the base unit
MODBUS® /RTU	Generic term for the protocol designed to use MODBUS® protocol messages on a serial communication
MODBUS® /TCP	Generic term for the protocol designed to use MODBUS® protocol messages on a TCP/IP network

ABOUT DRAWING SOFTWARE VERSION

This manual explains the drawing software functions of the following versions.

- GT Designer3 Version1.45X
- GT Designer2 Version2.111R or later

For GT Designer3 of a version older than the above one and GT Designer2, some functions are not supported. Therefore, displayed screens, setting items, and others may differ from those described in the manual.
For the functions added by version upgrade of the GT Designer2, refer to the following.

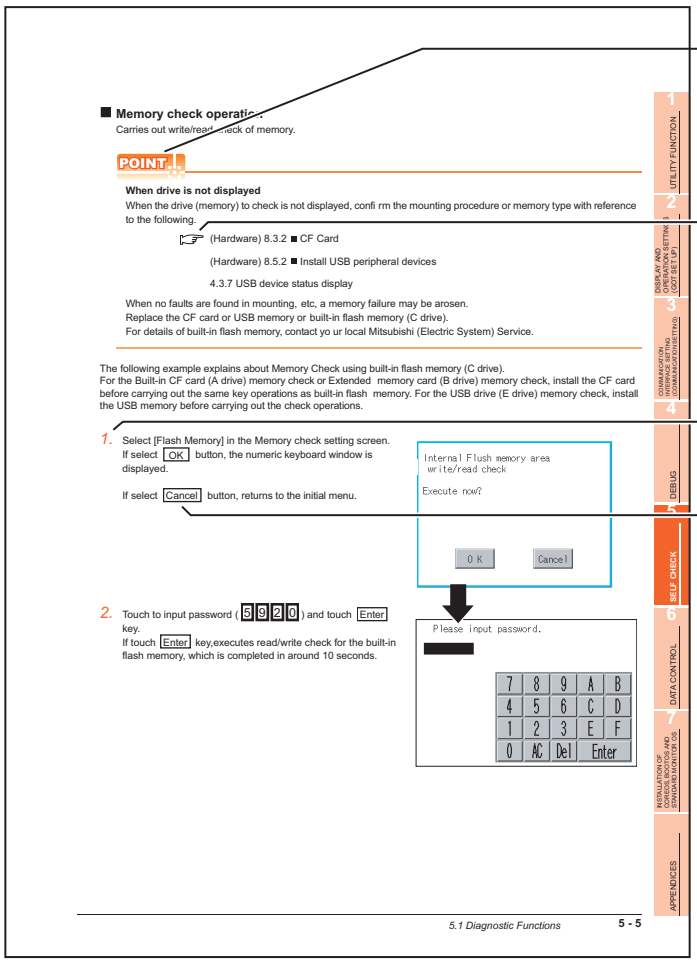
☞ GT Designer2 Version 2 Screen Design Manual

For the functions added by the version upgrade of GT Works3, contact your local distributor.

HOW TO USE THIS MANUAL

■ Symbols

Following symbols are used in this manual



POINT — Refers to information required for operation.

HINT — Refers to information useful for operation.

Show the items including detailed explanation
(Hardware) :
GT16 User's Manual (Hardware)
(Basic Utility) :
GT16 User's Manual (Basic Utility)

Shows the operation steps.
Operate the steps from the step 1.

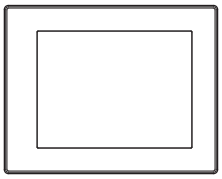
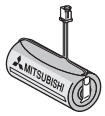
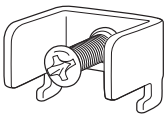
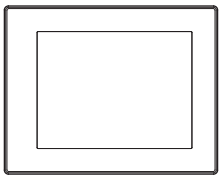
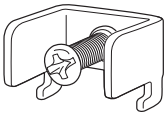
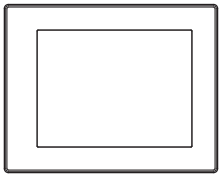
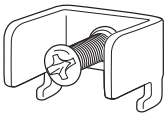
[ ] : Shows the setting item displayed on the software screen or the GOT screen.

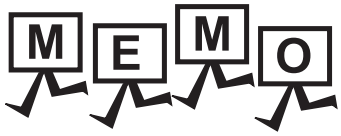
[ ] : Refers to a button displayed on the computer screen or the GOT screen, or a key of the computer keyboard.

* The above is different from the actual page, as it is provided for explanation only.

PACKING LIST

After unpacking, confirm that the following parts are included.

Model	Product	Quantity
GT1695M-X	GOT 	1
	Battery 	1
	Installation fitting 	8
	GT16 General Description	1
GT1685M-S GT1675M-S GT1675M-V GT1675-VN GT1672-VN GT1665M-S GT1665M-V GT1662-VN	GOT 	1
	Battery	1
	Installation fitting 	4
	GT16 General Description	1
GT1655-V	GOT 	1
	Battery	1
	Installation fitting 	4
	GT16 General Description	1


MEMO

1. UTILITY FUNCTION

Utility is a function, which carries out connection of GOT and controller, screen display and operation method settings, program/data control and self-check etc.

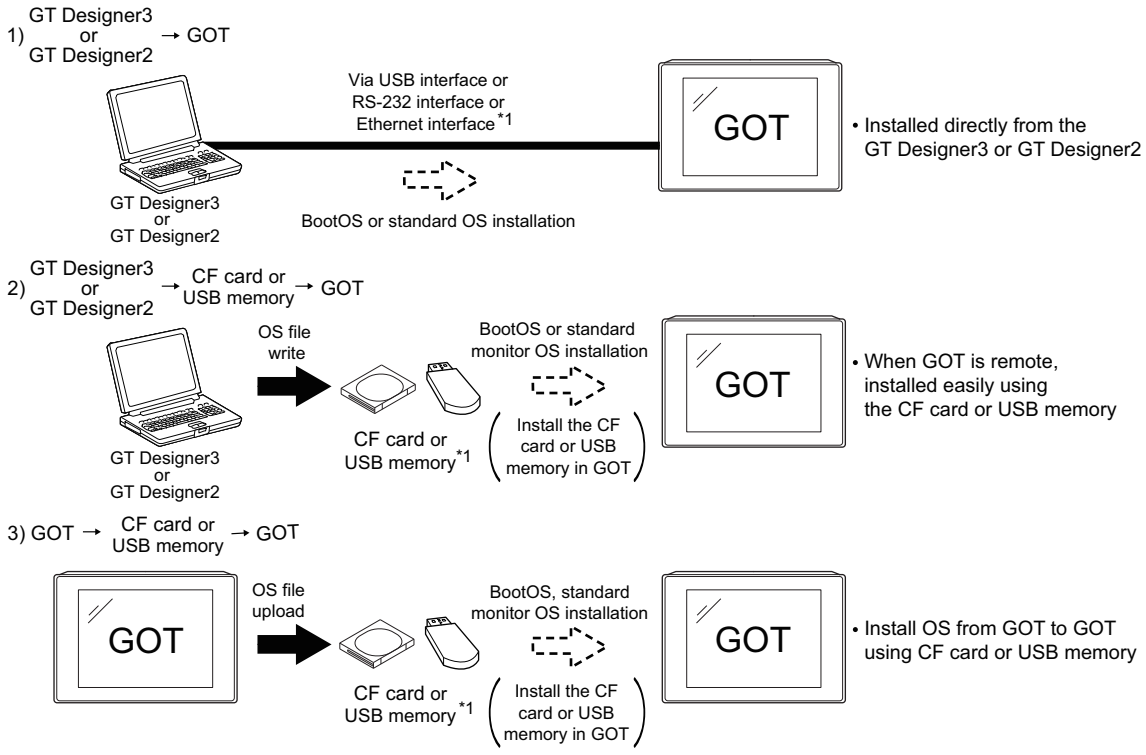
Refer to the following for the utility function list.

1.2 Utility Function List

1.1 Utility Execution

For utility execution, utility has to be displayed by installing BootOS and standard monitor OS in the C drive (built in flash memory).

There are following three types for the installing BootOS and standard monitor OS methods.



*1 When installing the BootOS and standard monitor OS, standard monitor OS has to be installed in GOT in advance.

Refer to the following for the installation which uses GT Designer3 or GT Designer2.

•GT Designer3 Version1 Screen Design Manual (Fundamentals)

•GT Designer2 Version☐ Basic Operation/Data Transfer Manual

Refer to the following for the installation which uses GOT.

7. INSTALLATION OF COREOS, BOOTOS AND STANDARD MONITOR OS

1.2 Utility Function List

The items in the following list can be set/operated on the utility screens.
For GT Designer3 of an old version and GT Designer2, displayed screens, setting items and others may differ from those described in the manual.

(○: Supported △: Partly supported × : Not supported)

Item			Functions overview	For GT Designer2	For GT Designer3	Reference
GOT setup	GOT main unit setup	Time setting	Displaying and setting the clock current time	○	○	2.1.1
		Transparent mode	Setting the channel No. to be used for the communication for the FA transparent function	○	○	2.1.2
		Clean	Displaying the screen for cleaning the display	○	○	2.1.3
		Video/RGB setting	Displaying the screen for setting the video/RGB I/O unit	○	○	2.1.4
		Multimedia setting	Displaying the screen for setting the multimedia	△	○	2.1.5
		License management	Displaying the screen for registering and releasing the license	×	○	2.1.6
		Behavior of duplicate IPs	Setting the GOT operation when a device with the same IP address as that of the GOT is added to the network afterwards.	×	○	2.1.7
	Display		Switching message languages	○	○	2.2
			Setting the startup screen display time and screen saving time	○	○	
			Setting the backlight to ON or OFF during screen saving	○	○	
			Setting the battery alarm display to ON or OFF	○	○	
			Setting the detect level/detect time of human sensor	○	○	
			Adjusting brightness and contrast	○	○	2.2.4
	Operation		Setting the buzzer volume and window move buzzer	○	○	2.3
			Setting the key sensitivity and key reaction speed	○	○	
			Setting the touch detection mode	○	○	
			Changing security levels	○	○	2.3.4
			Setting the utility call keys	○	○	2.3.5
			Adjusting the touch panel	○	○	2.3.6
			Setting the USB mouse/keyboard	×	○	2.3.7
			Setting the SoftGOT-GOT link function	×	○	2.3.8
			Setting the VNC® server function	×	○	2.3.9
	GOT maintenance	Maintenance timing setting	Setting the maintenance notification times for the backlight and display Setting the number of maintenance notifications for touch keys and the built-in flash memory	○	○	2.4.1
		Addition times reset	Resetting accumulated hours and counts for maintenance time notifications	○	○	2.4.2
		GOT start time	Displaying the GOT start date and time, current time, and accumulated operating hours	○	○	2.4.3
		GOT information	Displaying the GOT information	×	○	2.4.4

(Continued to next page)

(○: Supported △: Partly supported × : Not supported)

Item			Functions overview	For GT Designer2	For GT Designer3	Reference
Communication setting	Communication setting	Communication setting	Assigning channel numbers and communication drivers to communication interfaces	○	○	3.1
			Setting communication parameters, setting or deleting sequence program protection key words, canceling sequence program protection status (When connecting to FX series CPU)	○	○	3.2
		Ethernet setting	Displaying the contents of Ethernet setting, changing the host	×	○	3.3
Debug	Monitor screens1	System monitor	Starting the system monitor	○	○	4.1
		Ladder monitor	Starting the ladder monitor	○	○	
		Network monitor	Starting the network monitor	○	○	
		Intelligent module monitor	Starting the intelligent module monitor	○	○	
		Servo amplifier monitor	Starting the servo amplifier monitor	○	○	
		Motion monitor	Starting the motion monitor	○	○	
		CNC monitor	Starting the CNC monitor	○	○	
		FX list editor	Starting the FX list editor	○	○	
		A list editor	Starting the A list editor	○	○	
		SFC monitor	Starting the SFC monitor	○	○	
		Ladder edit	Starting the ladder edit	○	○	
		MELSEC-L troubleshooting	Starting the MELSEC-L troubleshooting	×	○	
		Motion SFC monitor	Starting the motion SFC monitor	×	○	
		Log viewer	Starting the log viewer	×	○	
	Monitor screens2	Motion program (SV43) editor	Starting the motion program (SV43) editor	×	○	
	Debug setting	Q/L/QnA ladder monitor	Setting the data storage location for the MELSEC-Q/L/QnA ladder monitor function	△	○	4.2.1
		Backup/ restoration setting	Setting the storage locations for backup data and backup settings, setting the maximum number of backup data, and setting whether to specify the backup CPU No. or not	△	○	4.2.2
			Setting the trigger backup	○	○	4.2.3

(Continued to next page)

(○: Supported △: Partly supported × : Not supported)

Item			Functions overview	For GT Designer2	For GT Designer3	Reference
Debug	Memory/ data control	Backup/ restoration	Executing the backup/restoration function	○	○	4.3.2
		GOT data package acquisition	Copying the OS, special data, and project data to a CF card or USB memory	○	○	4.3.3
		CNC data I/O function	Starting the CNC data I/O function	○	○	4.3.4
		Memory card format	Formatting a CF card or USB memory	○	○	4.3.5
		Memory information	Displaying the available memory of the GOT	○	○	4.3.6
		USB device status display	Displaying the status of USB device	○	○	4.3.7
		SRAM control	Confirming the SRAM user area usage, backing up or restoring the data in the SRAM user area, and initializing the SRAM user area	×	○	4.3.8
		Motion program (SV43) I/O	Starting the motion program (SV43) I/O	×	○	4.3.9
Self check	Diagnostic functions	System alarm	Displaying the system alarm	○	○	5.1.2
		Memory check	Write/read check of the CF card or USB memory and built-in flash memory.	○	○	5.1.3
		Drawing check	Checking the drawing	○	○	5.1.4
		Font check	Checking the font	○	○	5.1.5
		Touch panel check	Checking the touch panel	○	○	5.1.6
		I/O check	Checking the I/O of RS-232 interface	○	○	5.1.7
		Network status display	Displaying the network status	△	○	5.1.8
		Ethernet status check	Checking the connection status of Ethernet	×	○	5.1.9
	Batch self check		Executing various diagnostics collectively and copying the result to a CF card or USB memory	△	○	5.2

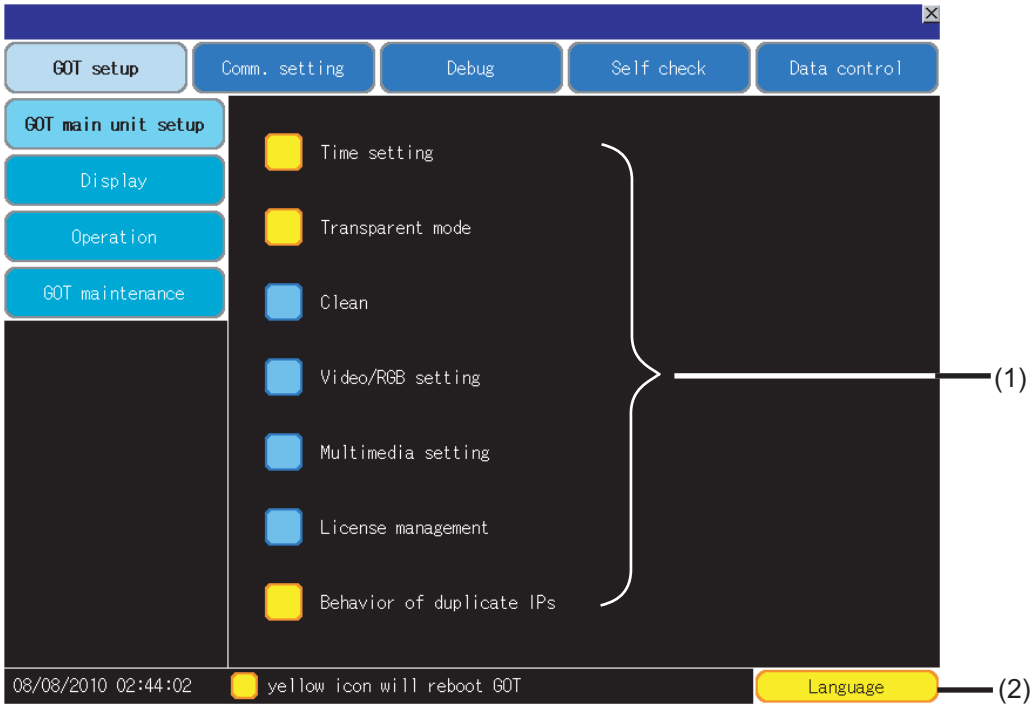
(Continued to next page)

(○: Supported △: Partly supported × : Not supported)

Item			Functions overview	For GT Designer2	For GT Designer3	Reference
Data control	Data control	Alarm information	Deleting or copying alarm log files	○	○	6.2.1
			Converting alarm log files in G1A format → CSV/TXT format	○	○	
			Displaying graphs of alarm log files	○	○	
		Advanced Recipe information	Converting advanced recipe files in GIP format → CSV/TXT format, Deleting/copying/moving advanced recipe files, creating a new advanced recipe file Deleting or moving advanced recipe folders, changing advanced recipe folder names, creating a new advanced recipe folder Writing/reading/matching record data and deleting device values with the advanced recipe record list	△	○	6.2.2
		Logging information	Converting logging files in G1L format → CSV/TXT format	○	○	6.2.3
			Deleting/copying/moving logging files, changing logging file names Deleting logging folders, creating a new logging folder	△	○	
		Operation log information	Converting operation log files in G1O format → CSV/TXT format	○	○	6.2.4
			Deleting/copying/moving operation log files, changing operation log file names Deleting operation log folders, creating a new operation log folder	△	○	
		Hard copy information	Deleting/copying hard copy files, changing hard copy file names	○	○	6.2.5
		Special data information	Deleting or checking special data files, deleting special data folders, downloading special data stored in the CF card/USB memory to the C drive (Built-in flash memory)	○	○	6.2.6
	OS/project information	Operator information	Adding/editing/deleting/importing/exporting operator information, changing passwords, setting the automatic logout time, password expiration date and external authentication ID	○	○	6.2.7
		Fingerprint information	Adding/deleting fingerprint information	○	○	6.2.8
		OS information	Installing or uploading OS, displaying OS property, checking OS data	○	○	6.3.1
		Project Information	Downloading/uploading/deleting/copying project files, displaying project file property, checking project file data	○	○	6.3.2

1.3 Utility Display

To display setting screens fot each utility, the main menu has to be displayed first.



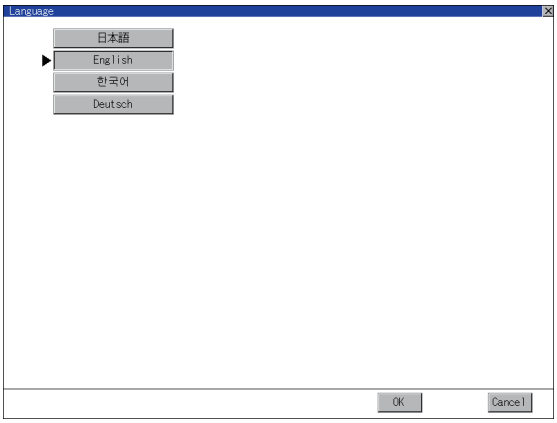
(1) Main menu

The menu items that can be set at the GOT utility are displayed.
Touching a menu item in the main menu will display the setting screen or following selection screen for the item.
In this manual, with a few special exceptions, explanations are given primarily using the GT1685M-S screens.

(2) System message switch button

This button switches the language used for the utility or system alarms.

When touching the Language button, the Select Language screen is displayed.

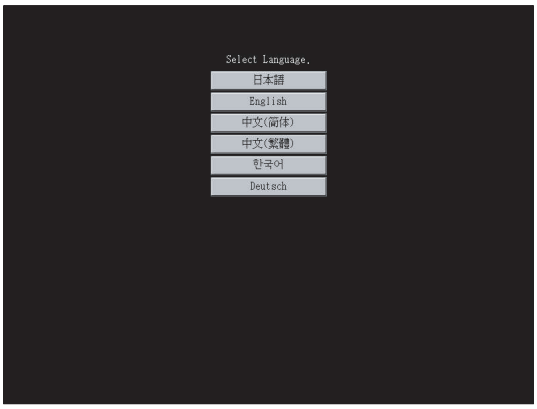


1. Touch the button of the language to be displayed.
2. Touching the [OK] button restarts the GOT and the language on the utility is switched to the selected one.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

POINT

When starting the GOT without selecting any language or the selected language and the installed fonts are not matched

The following screen will be displayed.
Touching the button of a desired language restarts the GOT and the language is switched to the selected one.



HINT

(1) Selectable languages

The system message switch button is displayed only for the selectable languages.
The selectable languages differ depending on the fonts installed in the GOT.
For the relation between the selectable languages and the fonts, refer to the following.

☞GT Designer3 Version1 Screen Design Manual (Fundamentals) (2.5 Specifications of Applicable Characters)

GT Designer2 Version☐ Screen Design Manual (2.3 Specifications of Applicable Characters)

(2) System language switching using the device

The system language can be switched using the system language switching device set with GT Designer3.
For the setting method of the system language switching device, refer to the following.

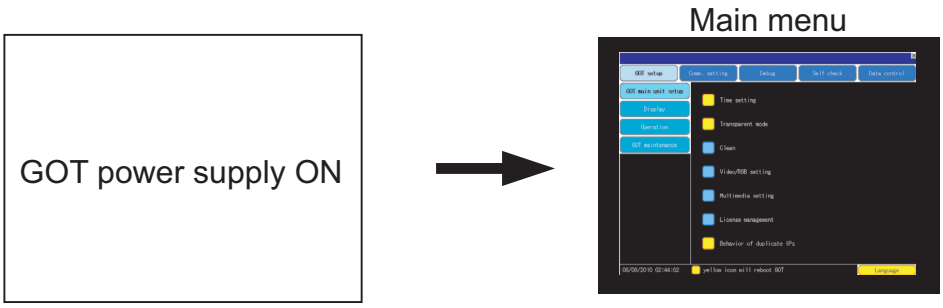
☞GT Designer3 Version1 Screen Design Manual (Fundamentals) (4.3 Language Switching Device Setting)

1.3.1 Display operation of main menu

The following three types of operation can display the main menu.
(Display the main menu after installing the basic OS from GT Designer3 or GT Designer2 to the GOT built in flash memory.)

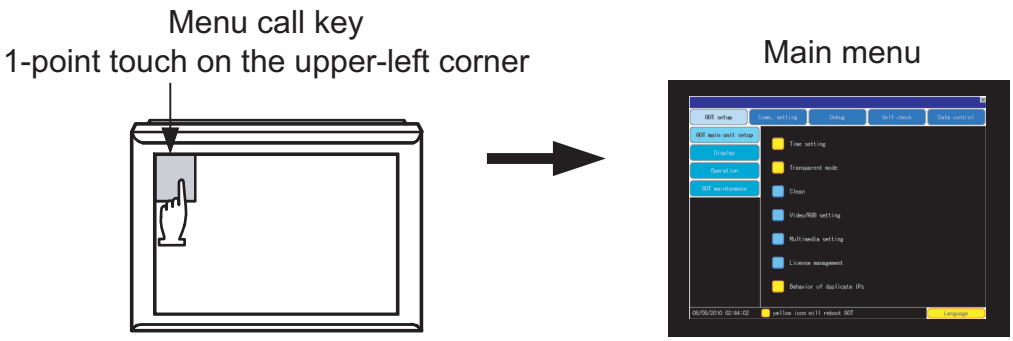
(1) When project data is undownloaded

If the power supply of GOT turns ON, the main menu is displayed automatically after title display.



(2) When touching menu call key

If you touch the menu call key while user-created screen is displayed, the main menu is displayed.
The menu call key is set in the position on the GOT screen upper left corner at factory shipment.



The menu call key can be set by the GOT utility, GT Designer3 or GT Designer2.
For the setting method of the utility call key, refer to the following.

•2.3.5 Utility call key setting
•GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.9 GOT Display and Operation Setting)
•GT Designer2 Version☐ Screen Design Manual
(3.8 Setting of GOT Display and Operations (GOT Setup))

POINT

(1) Prohibited simultaneous 2-point presses

Do not touch 2 points or more on the GOT screen simultaneously. Touching 2 points or more simultaneously may activate a part other than the touched point.

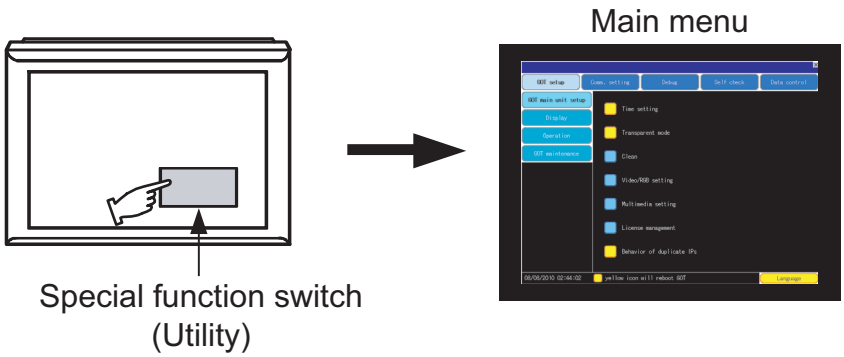
(2) When setting menu call key to 1-point

When having set [Pressing time] of the menu call key setting screen to other than "0 (s)", keep pressing the touch panel for the period set to [Pressing time] or more before leaving the finger from the touch panel.
For menu call key setting, refer to the following.

2.3.5 Utility call key setting

(3) When touching special function switch (utility)

If you touch the special function switch (utility) while user-created screen is displayed, the main menu is displayed.
The special function switch (utility) can be set as a touch switch that is displayed on a user-created screen by GT Designer3 or GT Designer2.



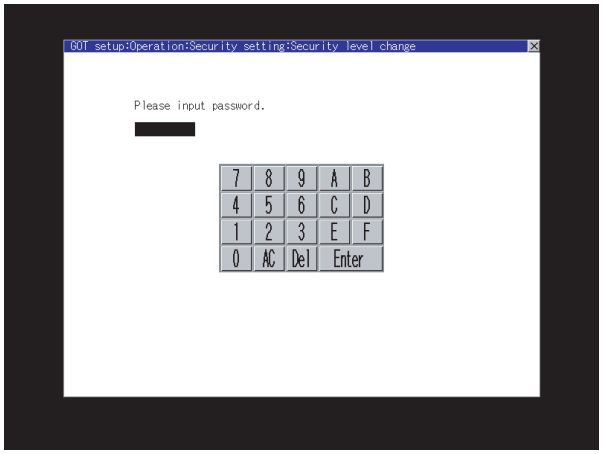
For the details of the special function switch, refer to the following.

•GT Designer3 Version1 Screen Design Manual (Functions)
(2.6 Setting Special Function Switch)
•GT Designer2 Version☐ Screen Design Manual
(6.2.5 Setting items of special function switch)

HINT

Locking the utility display by password

When you try to display the utility main menu while the password is set to the GOT by GT Designer3 or GT Designer2, the display for password input will be appeared.
(The password setting of GT Designer3 is in the common menu. The password setting of GT Designer2 is in the common menu.)



When the password is not matched, displays the error message.

When touching the [OK] button, the screen returns to the monitor screen.

(1) Input operation of password

1. Input the password after touching [0] to [9], [A] to [F] key.
2. Define the password by touching [Enter] key, after password input.
3. To correct the input character, touch [Del] key to delete the correcting character and reinput/retype the new character.

(2) Password input cancel operation

When ☒ button is touched, it returns to the monitor screen.

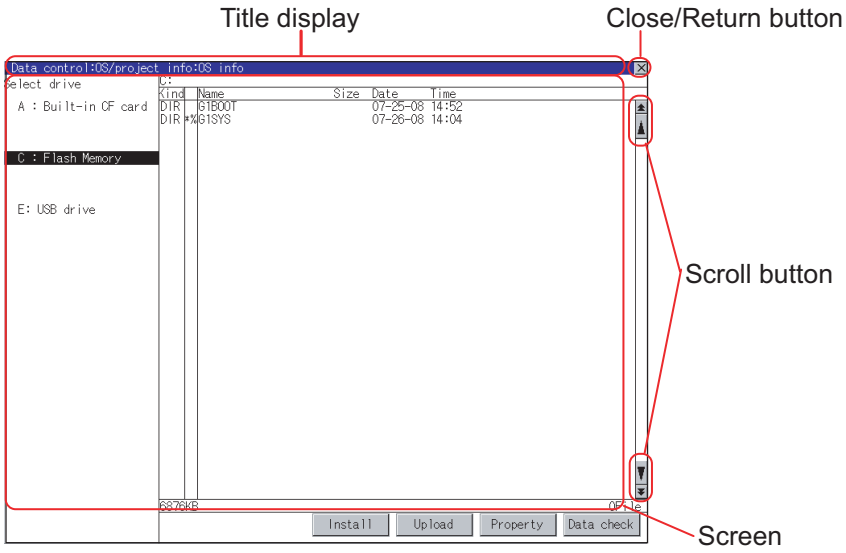
Refer to the following for the details related to the password setting.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)

•GT Designer2 Version□ Screen Design Manual

1.3.2 Utility basic configuration

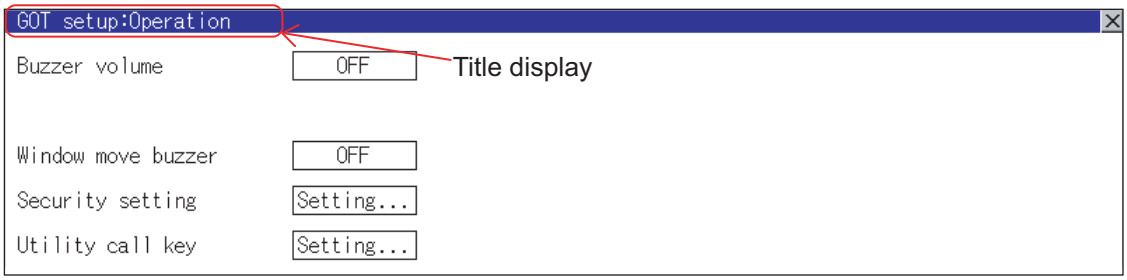
The basic configuration of utility is as follows.

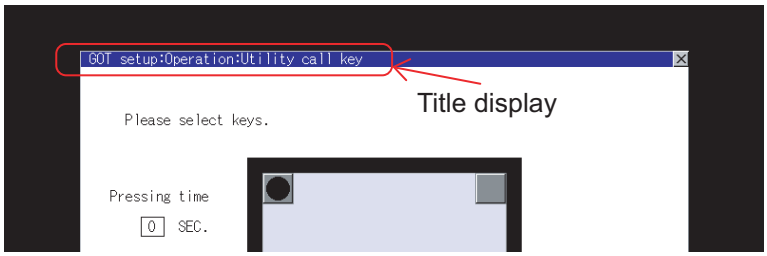


(1) Title display

The screen title name is displayed in title display part.

As the screen is composed of multiple layers, the title including these layers is displayed.





(2) Close/Return button

When a middle screen of the layers is displayed, if the ☒ (Close/return) button in the right corner of screen is touched, returns to the previous screen.

If this button is touched when directly displayed from monitor screen, the screen is closed and returns to monitor screen.

(3) Scroll button

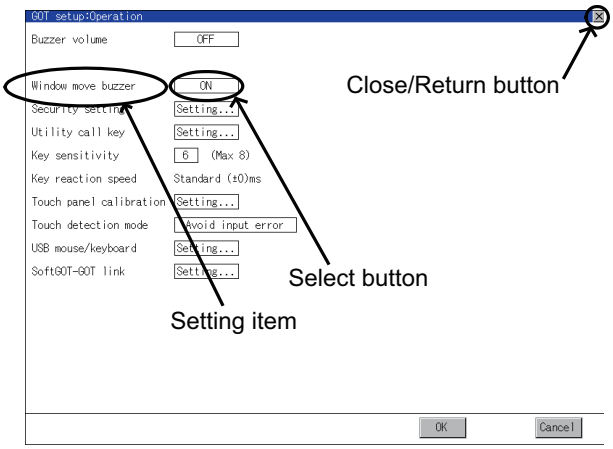
For screens in which the content does not fit on one screen page, there is a right or down scroll button on the screen.

▲/▼/◀/▶ Scroll one line/column

⏫/⏬/⏪/⏩ Scroll window

1.3.3 Basic operation of settings change

■ Change of setting value



Example: [Operation] screen

(1) Setting item, select button

Touch the select button to change the settings.
The setting methods differ depending on the setting items.
The following types of setting method are available.

(a) Switch the setting value.

Touch the button to switch the setting value as shown in ON ⇄ OFF.

(b) Enter the setting value with a keyboard.
Touch the button to display a keyboard on the GOT screen.
For the keyboard operation, refer to the following.

☞ ■Keyboard operation

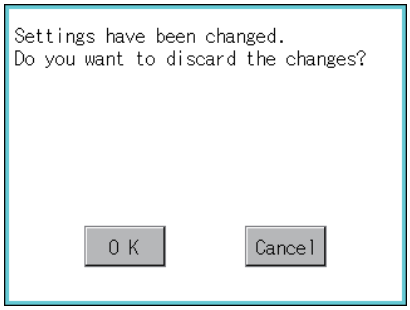
(c) Move to another setting screen.
Touch the button to move to another setting screen.

For the setting method of each setting item, refer to the setting operation of each setting screen.

(2) [OK] button, [Cancel] button, ☒ (Close/Return) button

Reflect or cancel the changed settings.

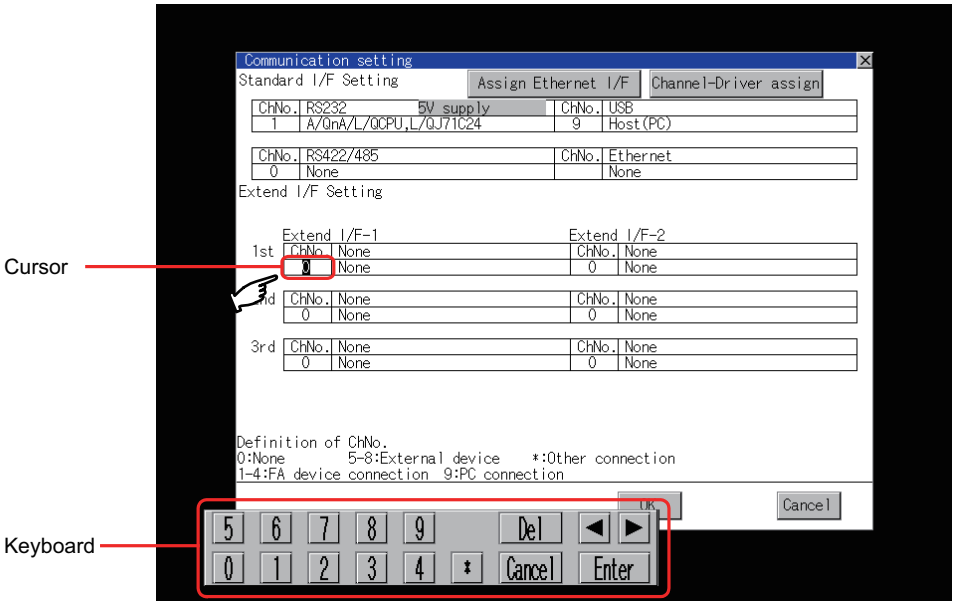
- [OK] button
  Touch this button to reflect the changed settings and return to the previous screen.
  Depending on the setting item, the GOT restarts.
- [Cancel] button
  Touch this button to cancel the changed settings and return to the previous screen.
- ☒ (Close/Return) button
  Touch this button to display the following dialog box. (If the settings are not changed, the dialog box is not displayed.)
  Operate following the message of the dialog box.



■ Keyboard operation

1. Touch the numerical value to be changed.

2. Keyboard for numerical input is displayed and cursor is displayed simultaneously.
   The key board display position chanegs by the position of numerical value touched.
   (At the time of numerical input, displayed in the position which will not interrupt the inputting.)



3. Input numeric with keyboard.
   - [0] to [9] Key: Input the numeric.
   - [Enter] Key: Complete numeric input and close the keyboard.
   - [Cancel] Key: Cancel numeric input and close the keyboard.
   - [◀]/[▶] Key: Moves the cursor to the right or left side.
     Available only if any selectable item is at the right/left side of the cursor.
   - [Del] Key: Cancel the input by 1 character.
   - [*] key and the key which is not mentioned do not function.

4. If [Enter] key is touched, numeric input is completed and keyboard is closed.

2. DISPLAY AND OPERATION SETTINGS (GOT SET UP)

Setting screen for display and setting screen for operation can be displayed from the GOT utility screen.
In the setting screen for display and the setting screen for operation, the following settings can be set.

Item	Description	For GT Designer2	For GT Designer3	Reference
Time setting	Clock setting, clock display, GOT internal battery voltage status	○	○	2.1.1
Transparent mode	Ch No.	○	○	2.1.2
Clean	Cleaning the display section	○	○	2.1.3
Video/RGB Setting	Video unit, video display, RGB display	○	○	2.1.4
Multimedia setting	Multimedia equipment, video display, long time recording setting	△	○	2.1.5
License management	Registering/releasing the license	×	○	2.1.6
Behavior of duplicate IPs	Setting the GOT operation when a device with the same IP address as that of the GOT is added to the network afterwards.	×	○	2.1.7
Display	Language, opening screen time, screen save time, screen save backlight, battery alarm display, sensor detect level, sensor detect time	○	○	2.2.1
	Adjusting the brightness and contrast	○	○	2.2.4
Operation	Buzzer volume, window move buzzer volume, Key sensitivity, Key reaction speed, Touch detection mode	○	○	2.3.1
	Security setting	○	○	2.3.4
	Utility call key	○	○	2.3.5
	Touch panel calibration	○	○	2.3.6
	USB mouse/keyboard setting	×	○	2.3.7
	SoftGOT-GOT link function setting	×	○	2.3.8
	VNC® server function setting	×	○	2.3.9
GOT maintenance	Maintenance timing setting	○	○	2.4.1
	Addition times reset	○	○	2.4.2
	GOT start time	○	○	2.4.3
	GOT information	×	○	2.4.4

2.1 GOT Main Unit Function Settings

2.1.1 Time setting

■ Time setting functions

Time setting and displaying of the status of GOT built-in battery are possible.

Item	Description	For GT Designer2	For GT Designer3	Reference
Time setting	Setup the method to adjust the time between GOT clock data and clock data of controller connected to the GOT.	○	○	(1) Time setting
Clock display	Carry out the display and setup of GOT clock data.	○	○	(2) Clock display
GOT internal battery voltage status	Displays GOT internal battery voltage status.	○	○	(3) GOT internal battery voltage status

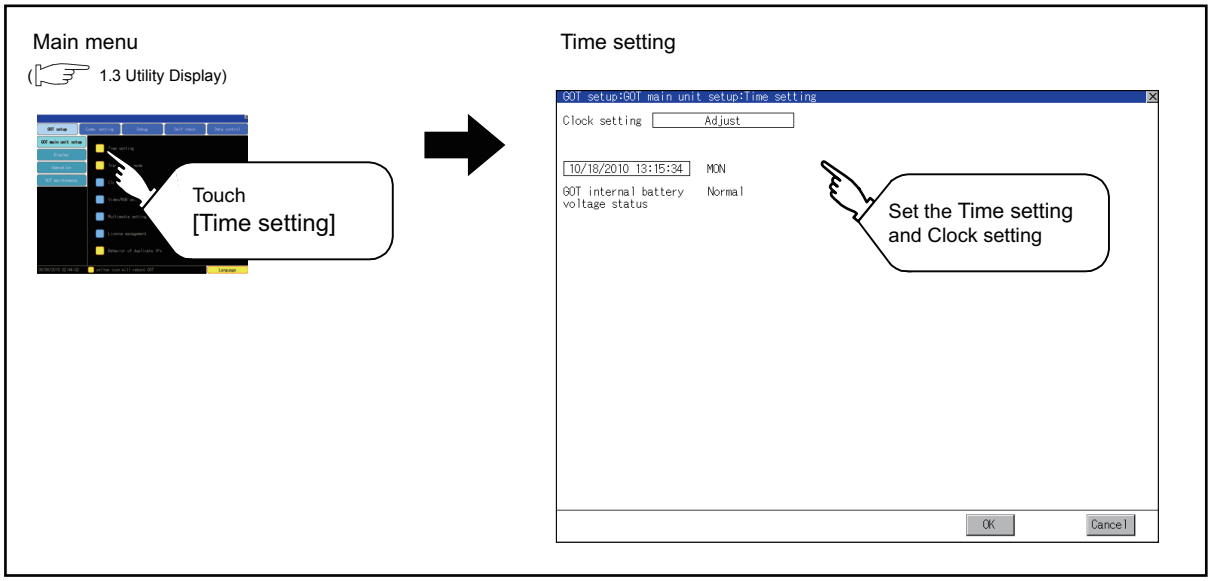
POINT

Changing times

When the time is changed on the Time setting & display screen, the changed time is written in a programmable controller even though [Adjust] or [Broadcast] is set for [Time setting].
As a result, the time of the programmable controller can be changed on the GOT even though [Adjust] is set for [Time setting].
(The clock data of the controller set as [Adjust CH No.] of [Clock data GOT is matched to clock data External (Adjust)] in [GOT Setup] ([Clock Setting]) of GT Designer3 or in [System Environment] ([Time setting]) of GT Designer2 is changed.)
For details of [Adjust] and [Broadcast], refer to the following manual.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
•GT Designer2 Version☐ Screen Design Manual

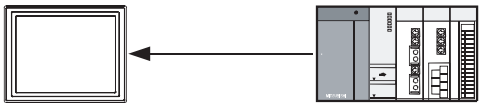
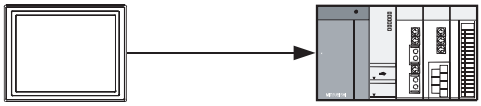
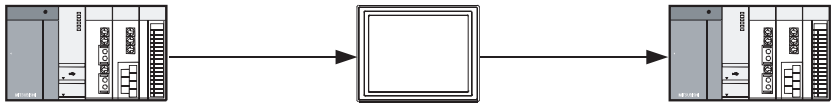
■ Display operation of time setting

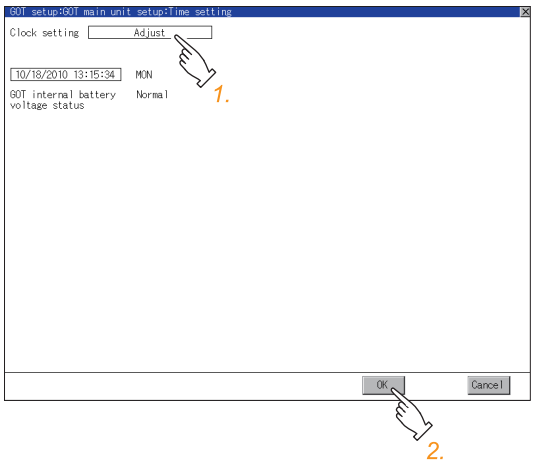


■ Operation of time setting

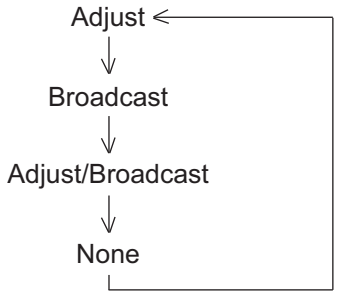
(1) Time setting

Setup the method to adjust the time between GOT data and the clock data of controller connected to the GOT.

Setting	Description
Adjust	Adjust the time of GOT clock data to the clock data of controller.  It is same as set in the GOT setup in Environmental Setting of GT Designer3 or in System Environment of GT Designer2. •GT Designer3 Version1 Screen Design Manual (Fundamentals) 4.9.2 How to match clock data between the GOT and controllers •GT Designer2 Version □ Screen Design Manual 2.5 Clock Function
Broadcast	Adjust the time of controller clock data to the clock data of GOT.  It is same as set in the GOT setup in Environmental Setting of GT Designer3 or in System Environment of GT Designer2. •GT Designer3 Version1 Screen Design Manual (Fundamentals) 4.9.2 How to match clock data between the GOT and controllers •GT Designer2 Version □ Screen Design Manual 2.5 Clock Function
Adjust/Broadcast	Adjust the GOT and controllers to the controller whose clock data is used as a base.  It is same as set in the GOT setup in Environmental Setting of GT Designer3 or in System Environment of GT Designer2. •GT Designer3 Version1 Screen Design Manual (Fundamentals) 4.9.2 How to match clock data between the GOT and controllers •GT Designer2 Version □ Screen Design Manual 2.5 Clock Function
None	No adjustment of clock data.



1. If touch the setup item, the setup contents is changed.



2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

POINT

(1) When connecting to an external device which does not have clock function

If set to [Adjust] or [Broadcast] for clock setting while the GOT is connected to external devices (PLC or microcomputers) which do not have clock function, the clock data will not be adjusted.
Refer to the following for the list of PLC installed with clock function.

•GOT1000 Series Connection Manual for GT Works3 and a controller used

•GT Designer2 Version ☐ Screen Design Manual
(2.5.3 PLC CPUs with clock function)

(2) Clock setting when using the multi-channel function

The channel No. of a controller whose clock is used as a base or adjusted cannot be set by the utility.
The controller whose clock is used as a base or adjusted can be set by GT Designer3 or GT Designer2.
For channel settings, refer to the following.

•GOT1000 Series Connection Manual for GT Works3 and a controller used

•GT Designer2 Version ☐ Screen Design Manual
(2.5.1 Synchronizing clock data between GOT and PLC CPU)

(3) Setting of clock setting and battery

The connector of the GOT is not connected to the battery connector at purchase.
When selecting [Broadcast] or [None] in clock setting, set the clock of the GOT once with connecting a battery to the GOT.

(4) Operation setting by GT Designer3 or GT Designer2

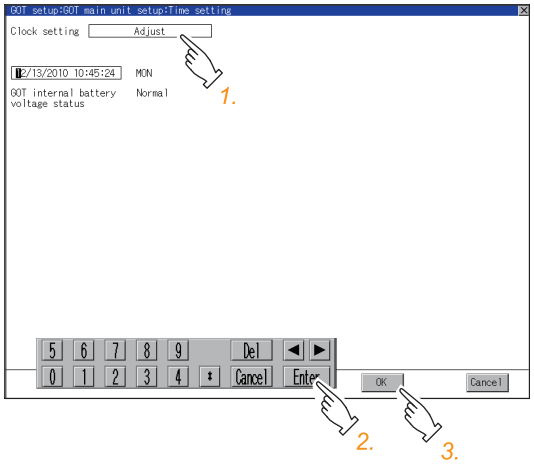
Carry out the setting of clock setting in [GOT set up] in [Environmental Setting] of GT Designer3 or in [System Environment] of GT Designer2.
To change a part of the setting after downloading the project data, change the setting at the display setting of GOT.

•GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.9 GOT Display and Operation Setting)

•GT Designer2 Version ☐ Screen Design Manual
(3.8 Setting of GOT Display and Operation (GOT Setup))

(2) Clock display

Carry out the display and seting of GOT clock data.
The setup methods of clock data are shown below.



1. If touch the clock display section, the keyboard for input is displayed and the clock update stops.
2. Input time with the keyboard by referring to the table below. Input the scheduled time when the operation of step3 is to be carried out since the input time is reflected at the time of the operation of step3.
   The day of the week is displayed automatically according to the input date.
   The effective range of clock setting is as follows.
   Jan. 1, 2000 to Dec. 31, 2037

Key	Description
[0] to [9]	Input numeric value in cursor position.
◀/▶	Move the cursor.
[Del]	Move the cursor to the left by one character when [Del] Key is touched while inputting year, month, day, time, minutes, seconds. Carry out nothing when touched other than when inputting the above.
[Enter]	Close the keyboard after the input time is displayed in clock display. The update of the clock display does not restart even if the keyboard is closed. The update of the clock display restarts with the operation of step3.
[Cancel]	Cancel the input time and returns the time of clock display to the time at which the keyboard was displayed and close the keyboard. The update of the clock display does not restart even if the keyboard is closed. The update of the clock display restarts with the operation of step3.

3. If touch the [OK] button, the changed settings are reflected and the screen returns to the Main Menu.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

(3) GOT internal battery voltage status

Displays battery voltage status.

Display	Status
Normal	Normal
Low/None	Low voltage

When the battery voltage is low, replace the battery immediately.
Refer to the following for battery replacement procedure.

(Hardware) 8.3.2 Installation procedure

2.1.2 Transparent setting (Transparent mode setting)

■ Function of the transparent mode

When using the multi-channel function, the channel No. of a controller to which the FA transparent function is executed can be specified.
For the multi-channel function, refer to the following manual.

☞ •GOT1000 Series Connection Manual (Mitsubishi Products) for GT Works3 (20 MULTI-CHANNEL FUNCTION)

•GT Designer2 Version □ Screen Design Manual (2.8 Multi-channel Function)

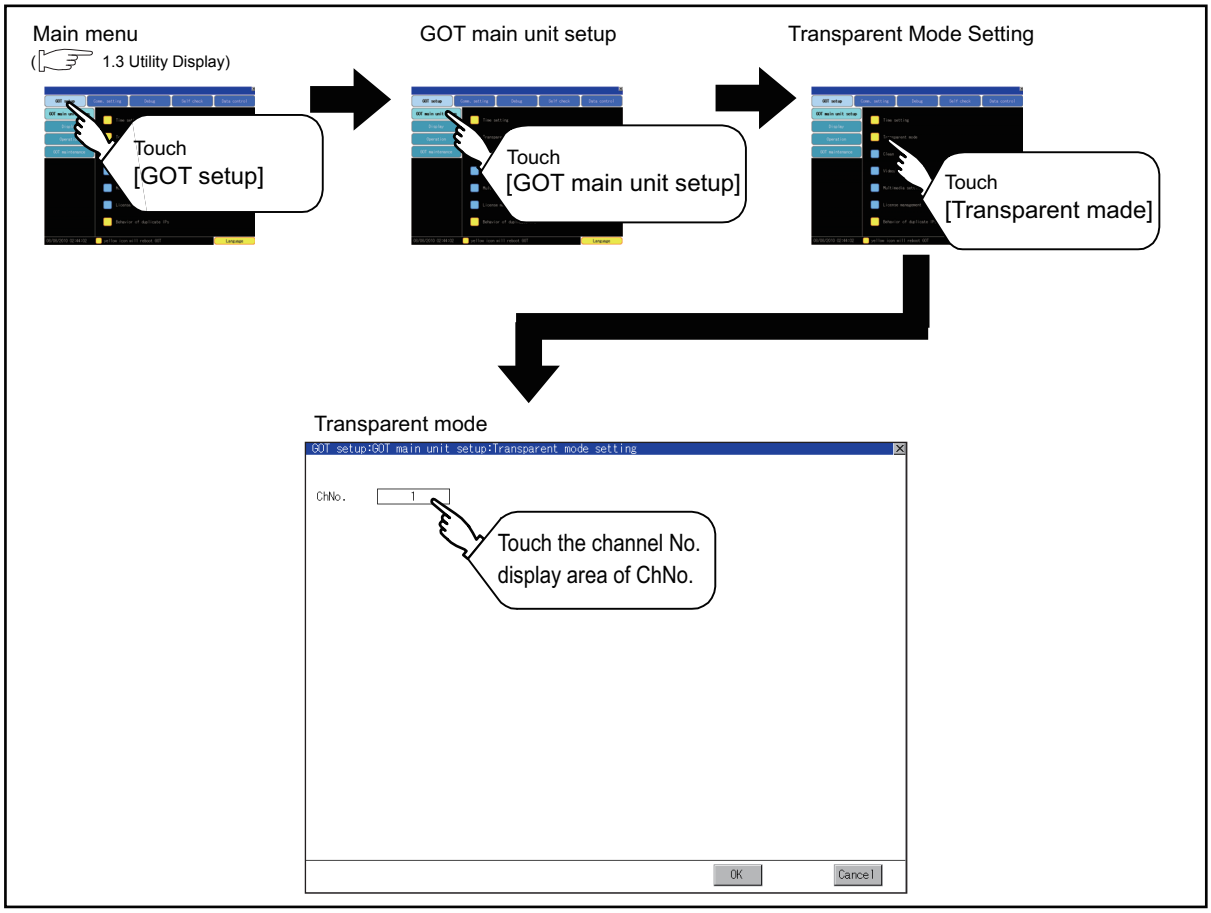
Also, refer to the following manual for the FA transparent function.

☞ •GOT1000 Series Connection Manual (Mitsubishi Products) for GT Works3 (21 FA TRANSPARENT FUNCTION)

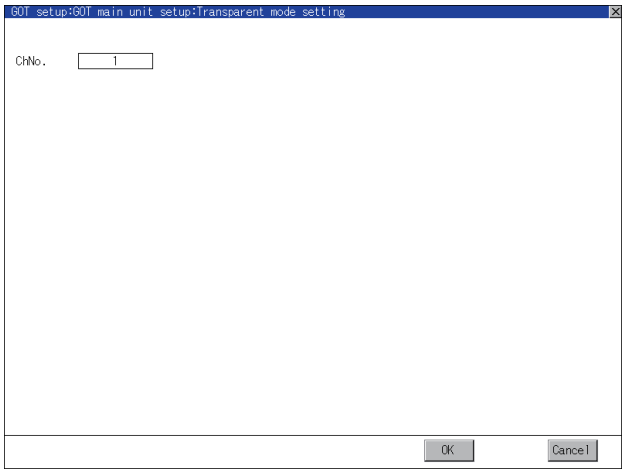
•GOT1000 Series Connection Manual for GT Designer2/GT Works2 (53 FA TRANSPARENT FUNCTION)

Functionf	Description	Setting range	For GT Designer2	For GT Designer3
ChNo.	The channel No. of a controller to which the FA transparent function is executed can be set.	1/2/3/4 <Default: 1>	○	○

■ Displaying the transparent mode



■ Operation the transparent mode



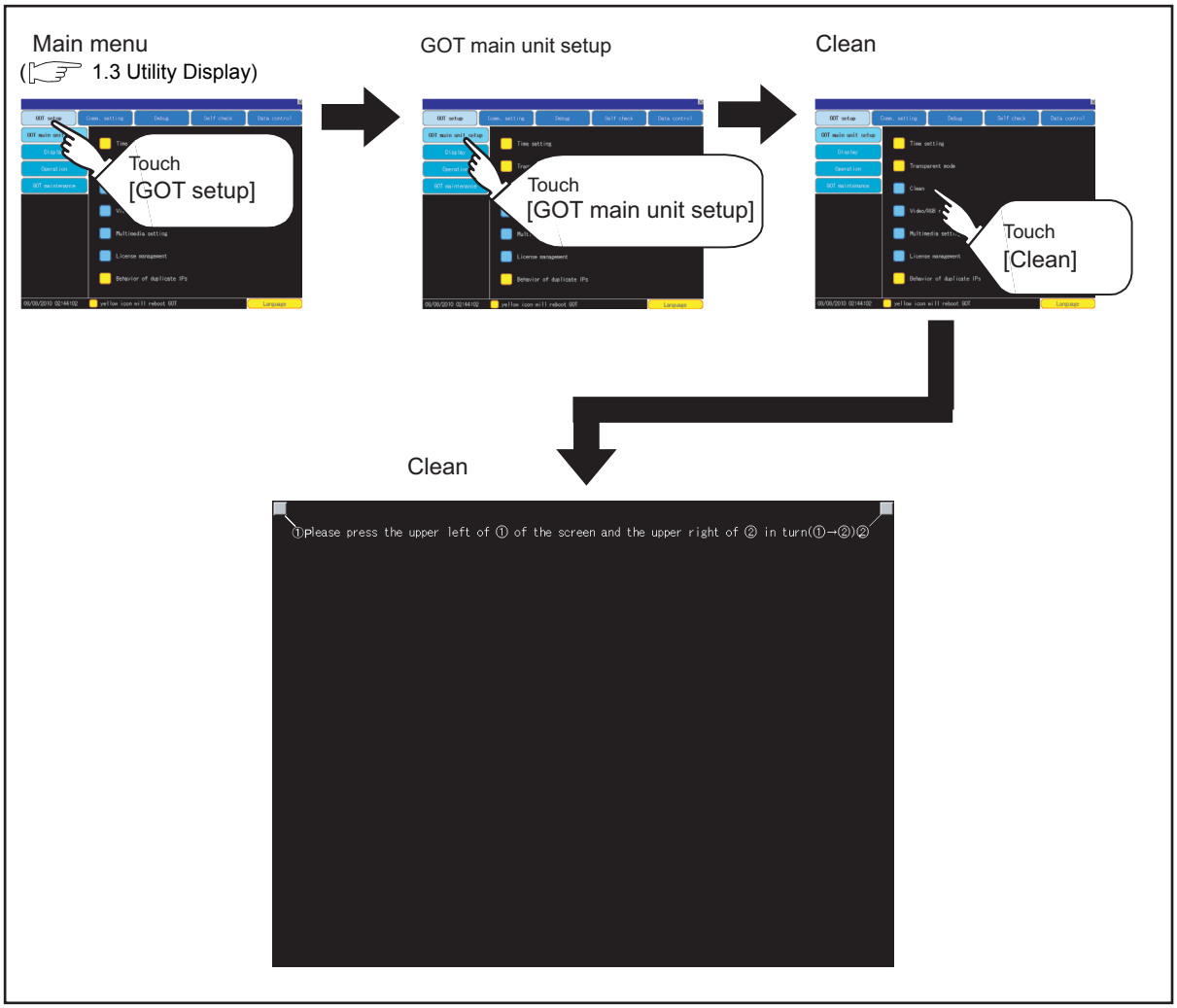
1. Touching the transparent ChNo. (numerical part) on the left, the keyboard is displayed. Input numerical value by the keyboard.
2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

2.1.3 Cleaning of display section (Clean)

In utility, the screen can be set as not to be effected by touching the screen when clean with clothes.
Refer to the below for the cleaning procedure.

(Hardware) 9.3 Cleaning Method

■ Display operation of Clean

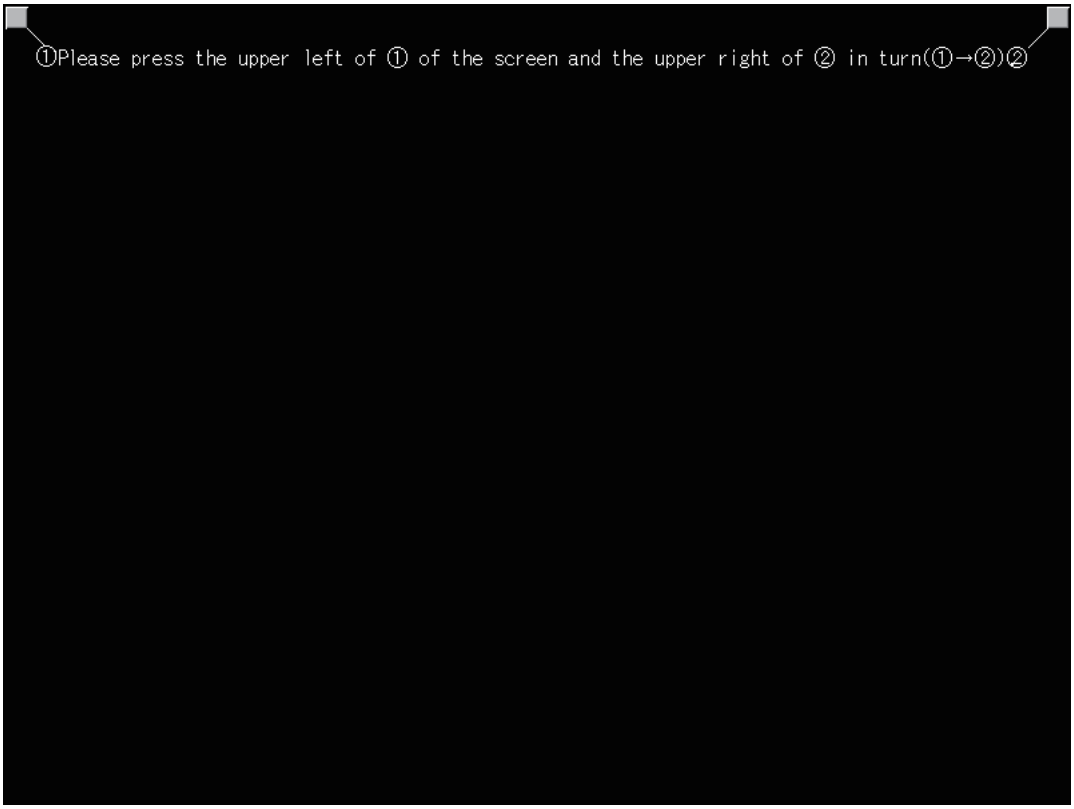


Even if touch points other than the upper left corner and upper right corner of the screen, the GOT does not operates.

■ Operation of Clean

After cleaning the screen, touch the screen following the instruction displayed.
After touching the screen, the screen returns to the Main Menu.

The following screen is displayed.



2.1.4 Video/RGB setting

■ Video unit setting

(1) Functions of the video unit settings

The video input signal and resolution can be selected.

Item	Description	Setting range	For GT Designer2	For GT Designer3
Video Unit Settings*1	The input signal and resolution can be selected.	Input signal: NTSC format, PAL format <At factory shipment: NTSC format> Resolution: 640 × 480, 720 × 480*2, 768 × 576*2 <At factory shipment : 640 × 480>	○	○

*1 GT1675-VN, GT1672-VN, GT1662-VN, GT1655-V cannot be used.

*2 Can be selected only in PAL format

For GT1675M-V or GT1665M-V, the resolution is 640 × 480.

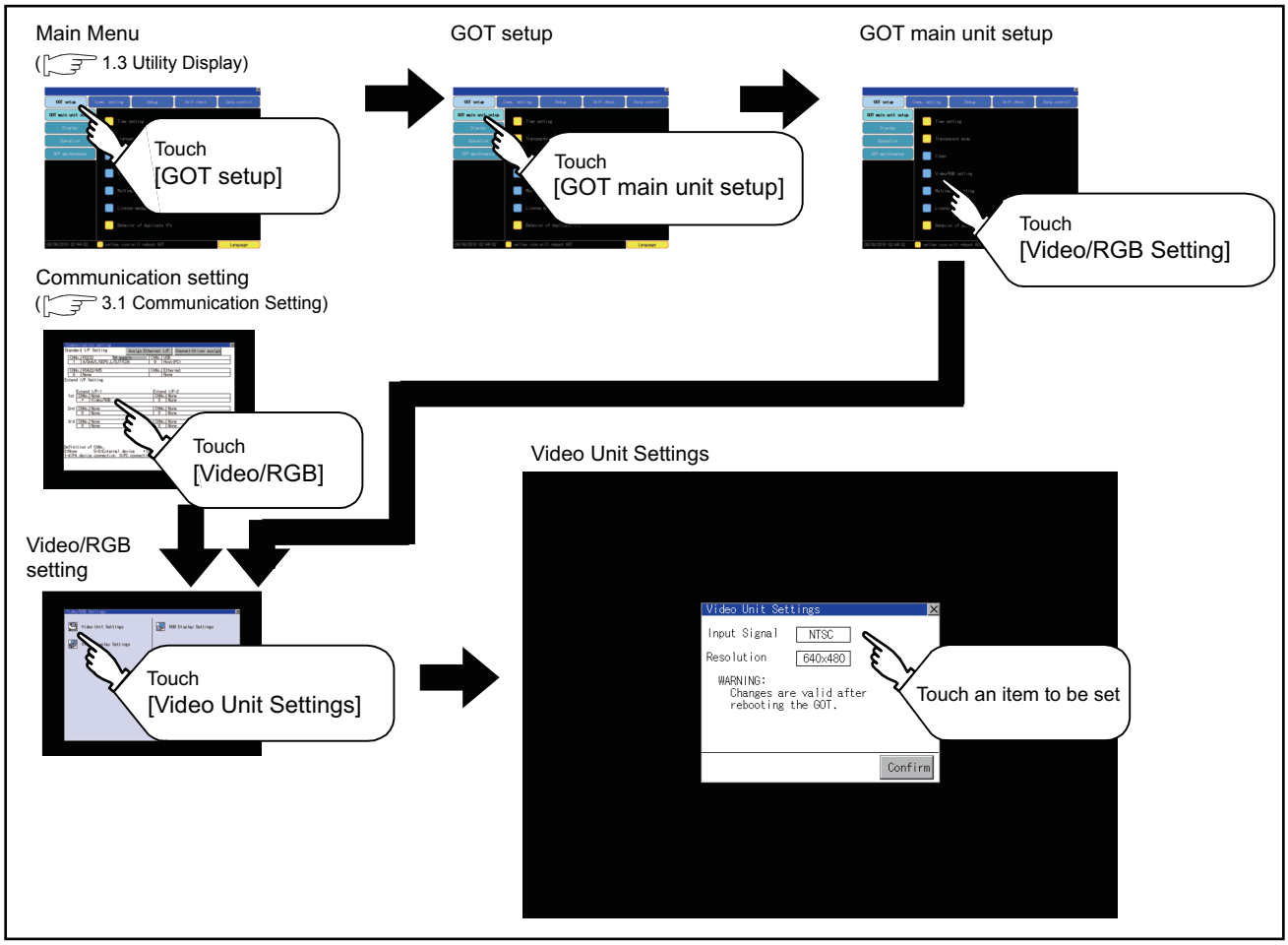
POINT

Input signal settings

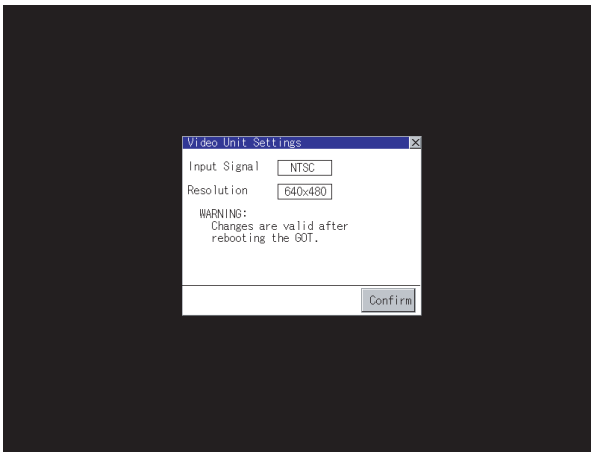
Set the input signal as follows according to the output format for the video camera or the like connected.
If the settings made differ from these, video images may not be displayed correctly.

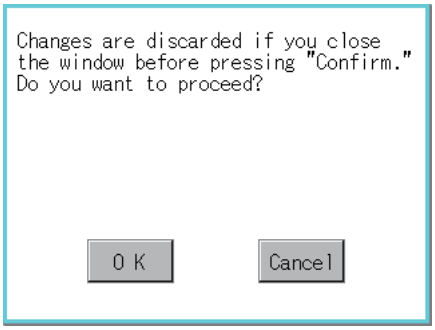
Output format for video camera or the like	Input signal setting
NTSC format	NTSC
PAL format	PAL
EIA format	NTSC
CCIR format	PAL

(2) Displaying the video unit setting



(3) Operating the video unit setting





1. When you touch the setting item, the setting contents change.
   Input signal :PAL
   NTSC
   Resolution :720 × 480
   768 × 576
   640 × 480

2. When you touch the [Confirm] button, the setting contents are determined.

3. If you touch the ☒ button without touching the [Confirm] button, the dialog box on the left is displayed.

4. After completing the settings for all the items you want to change in [Video Unit Settings], when closing [Video Unit Settings] and [Video/RGB Setting]/[Communication Setting] with the ☒ button, the GOT is restarted, and the new setting contents are reflected.

■ Video Display Setting

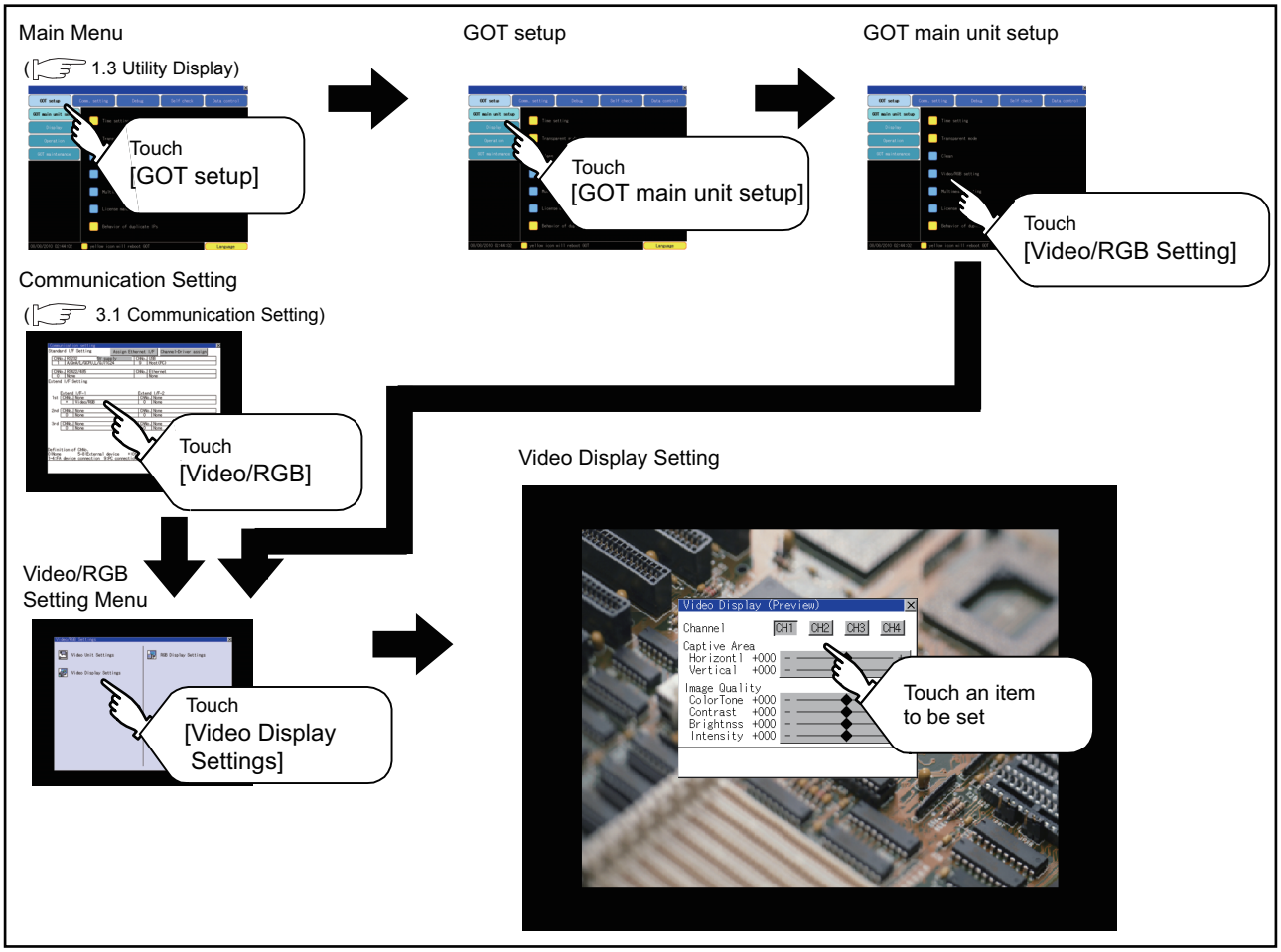
(1) Functions of the video display settings

The target for the video settings and the preview channel can be selected and the captive area and image quality can be set.

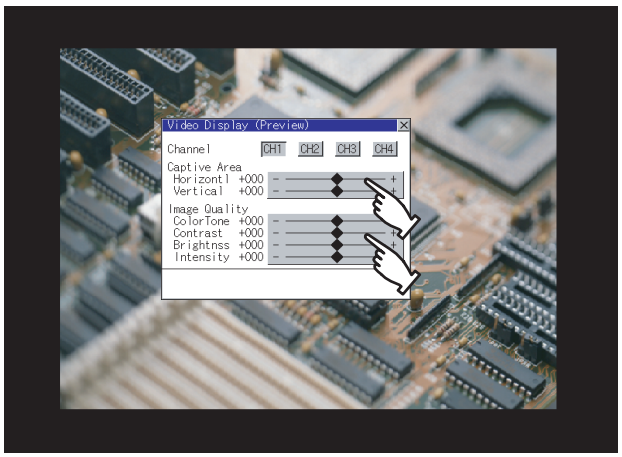
Item	Description	Setting range	For GT Designer2	For GT Designer3
Video Display Settings*1	The target for the video settings and the preview channel can be selected and the captive area (in the horizontal direction and vertical direction) and image quality (color tone, contrast, brightness, color intensity) can be set. The captive area and image quality can be set for each channel.	Channel 1/2/3/4 <At factory shipment : 1> Captive area Horizontal: -100 to 100 <At factory shipment: 0> Vertical: -100 to 100 <At factory shipment: 0> Image Quality and Color Tone: -100 to 100 <At factory shipment: 0> Contrast: -100 to 100 <At factory shipment: 0> Brightness: -100 to 100 <At factory shipment: 0> Intensity: -100 to 100 <At factory shipment: 0>	○	○

*1 GT1675-VN, GT1672-VN, GT1662-VN, GT1655-V cannot be used.

(2) Displaying the video display setting

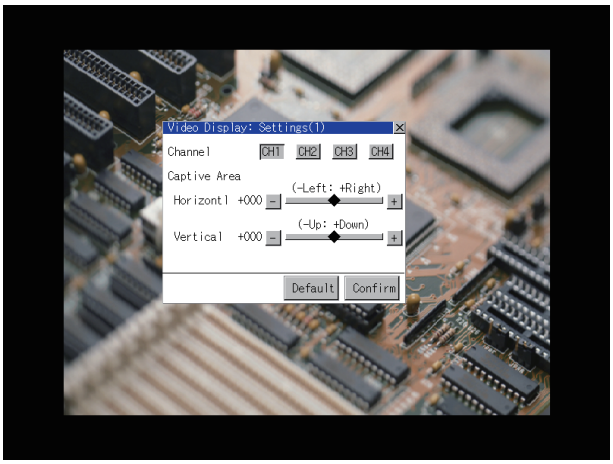


(3) Operating the video display setting

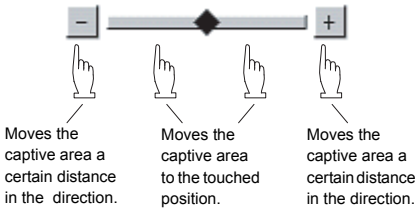


1. Select a video channel No. to be displayed.
   The video image for the selected channel No. is previewed.

2. To change the captive area or image quality, touch the display section of each item.
   Captive Area : Refer to step3 to step6.
   Image Quality : Refer to step7 to step10.

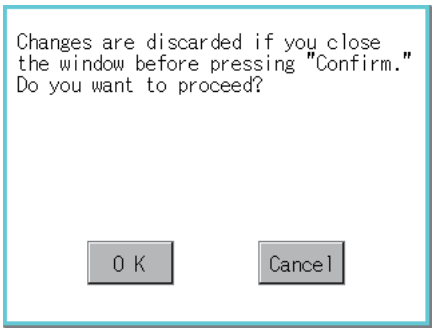


3. The captive area (horizontal direction/vertical direction) for the selected channel No. can be changed.



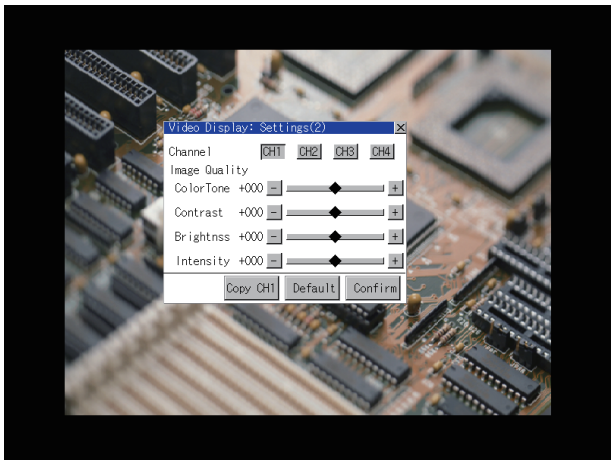
Touching the [Default] button returns to the default status.

4. When touching the [Confirm] button, the setting contents are determined.

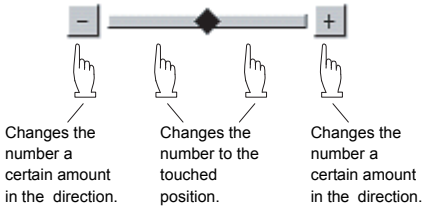


5. If you touch the ☒ button without touching the [Confirm] button, the dialog box on the left is displayed.

6. After completing all the items to set, if you touch the ☒ button, the display returns to the preview screen step1.



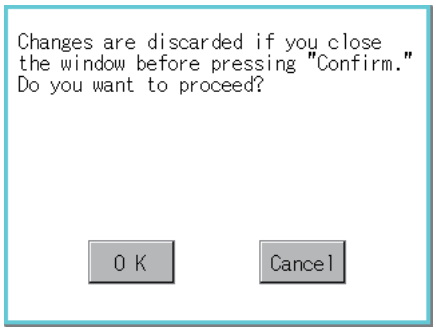
7. The image quality (color tone, contrast, brightness, color intensity) for the selected channel No. can be changed.



Touching the [Default] button returns to the default status.
When touching the [Copy CH1] button, the image quality (color tone, contrast, brightness, color intensity) for the selected channel No. is matched with the image quality settings for Channel No. 1 ([CH1]).

8. When touching the [Confirm] button, the setting contents are determined.

9. If you touch the ☒ button without touching the [Confirm] button, the dialog box on the left is displayed.



10. After completing all the items to set, if you touch the ☒ button, the display returns to the preview screen step1.

11. After completing the settings for all the items you want to change in the video display settings, when closing [Video Display (Preview)] with the ☒ button, the display returns to [Video/RGB Setting].

POINT

Precautions for setting

Incorrect settings may disrupt or stop the video image.
(If this happens, returning the settings to their default values restores normal display.)
This phenomenon depends on the video camera or other device connected.
Use setting values that provide proper display.

■ RGB Display Setting

(1) Functions of the RGB display settings

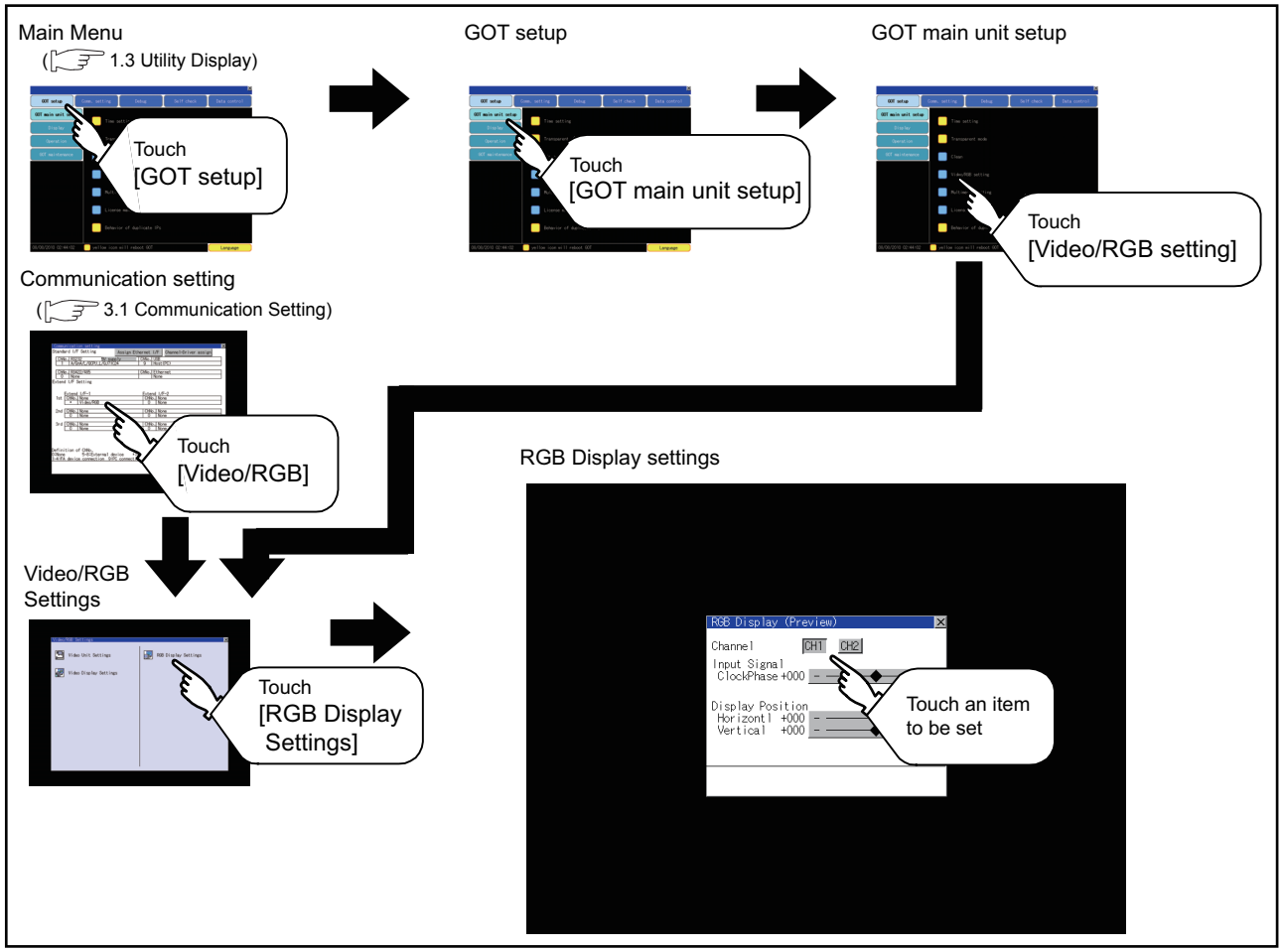
The RGB clock phase and screen position can be set.

Item	Description	Setting range	For GT Designer2	For GT Designer3
RGB Display Settings *1	The target for the RGB settings and the preview channel can be selected and the RGB clock phase *2 and screen position (horizontal direction and vertical direction) can be set.	Channel 1/2 <At factory shipment : 1> ClockPhase: -100 to 100 <At factory shipment: 0> Display position Horizontal: -100 to 100 <At factory shipment: 0> Vertical: -100 to 100 <At factory shipment: 0>	○	○

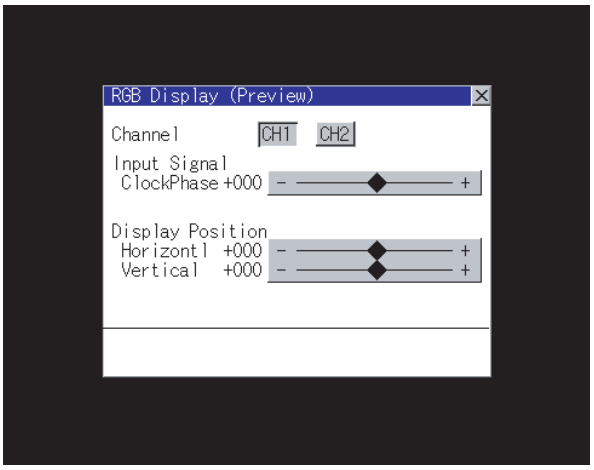
*1 GT1675-VN, GT1672-VN, GT1662-VN, GT1655-V cannot be used.

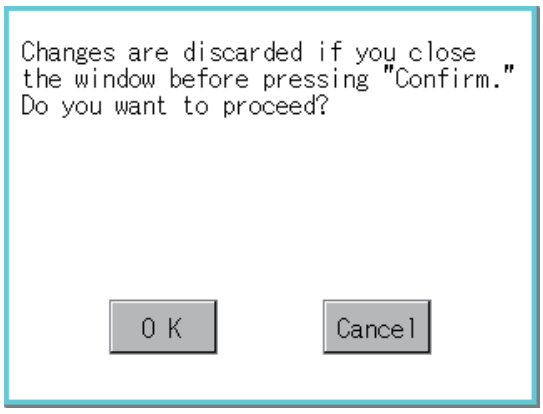
*2 Adjust when a noise is displayed along the horizontal direction or characters are blotted or the contours are unclear.

(2) Displaying the RGB display settings

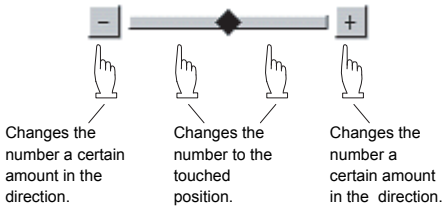


(3) Operating the RGB display setting





1. Select an RGB channel No. to be displayed. The RGB image for the selected channel No. is previewed.
2. The clock phase and screen display position (horizontal direction/vertical direction) can be changed.



3. When touching the [Confirm] button, the setting contents are determined.
4. If you touch the ☒ button without touching the [Confirm] button, the dialog box on the left is displayed.
5. After completing all the items to set, if you touch the ☒ button, the display returns to [Video/RGB Setting].

POINT

Precautions for setting

If the value for [Horizontal] or [Vertical] is too large, RGB display may not be performed or the display may be disrupted or stopped.
If this happens, return the settings to their default values and make settings in the range where RGB display is possible.

2.1.5 Multimedia setting

■ Video Unit Settings

(1) Functions of the video unit settings

The video input signal and resolution can be selected.

Item	Description	Setting range	For GT Designer2	For GT Designer3
Video Unit Settings *1	The input signal and resolution can be selected.	Input signal: NTSC format, PAL format <At factory shipment: NTSC> Resolution: 640×480*2, 768×576*3 <At factory shipment : 640×480>	○	○

*1 GT1675-VN, GT1672-VN, GT1662-VN, GT1655-V cannot be used.

*2 When NTSC format is selected, the resolution is fixed to 640 × 480.

*3 When PAL format is selected, the resolution is fixed to 768 × 576.

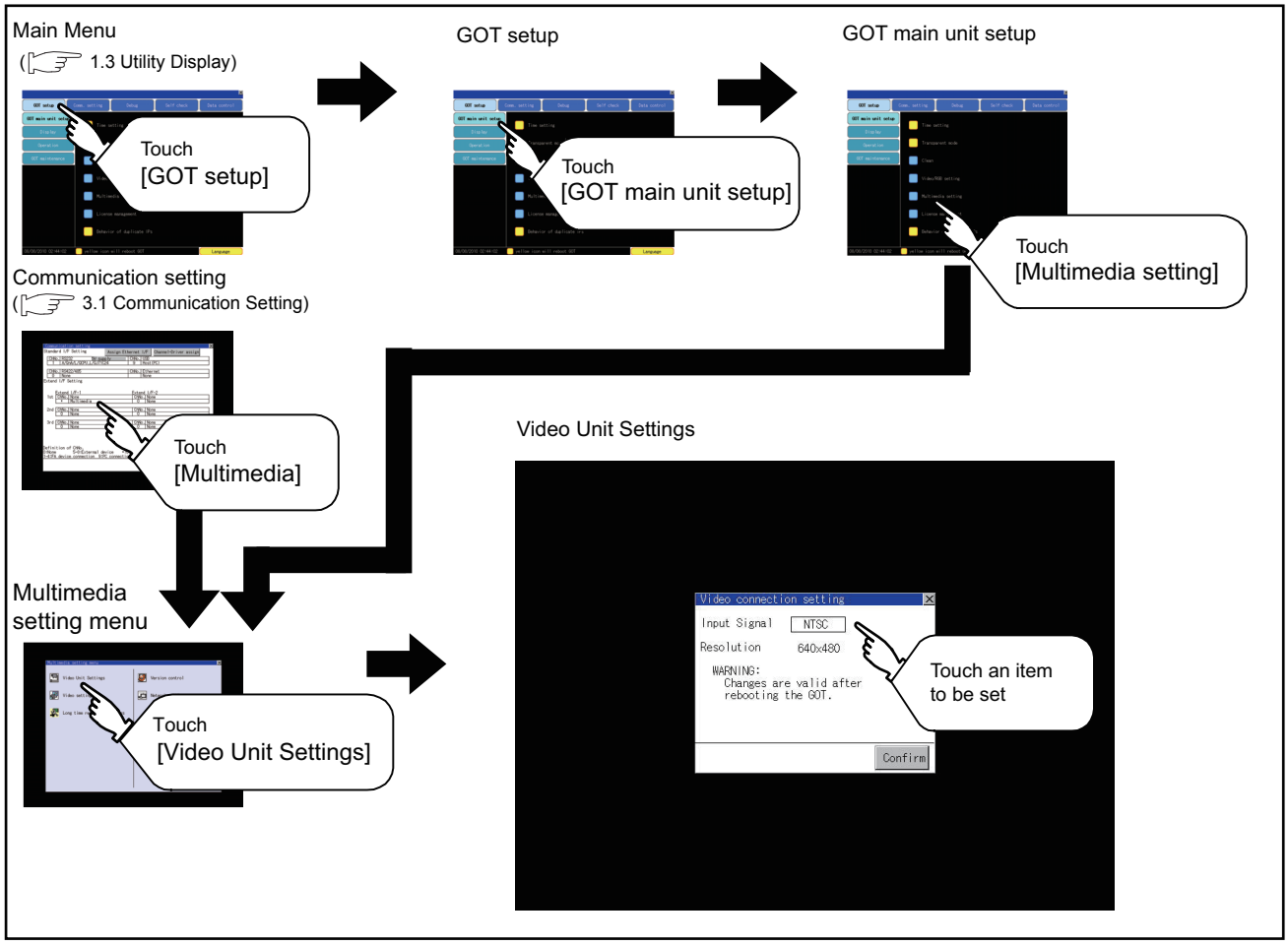
POINT

Input signal settings

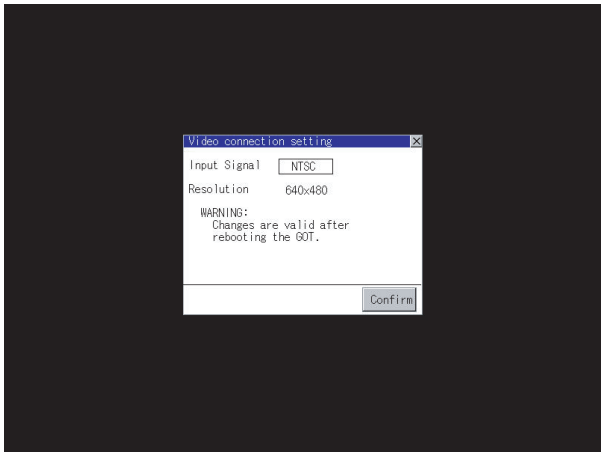
Set the input signal as follows according to the output format for the video camera or the like connected.
If the settings made differ from these, video images may not be displayed correctly.

Output format for video camera or the like	Input signal setting
NTSC format	NTSC
PAL format	PAL
EIA format	NTSC
CCIR format	PAL

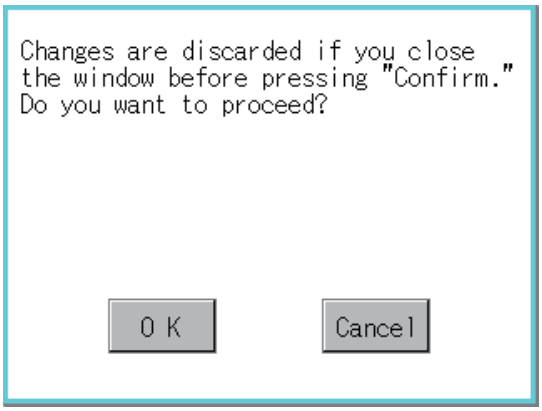
(2) Displaying the video unit setting



(3) Operating the video unit setting



1. When you touch the setting item, the setting contents change.
   Input signal :PAL
   NTSC
   Resolution :720 × 480
   640 × 480
   Resolution automatically switches to 640 × 480 when NTSC is selected and to 768 × 576 when PAL is selected.
2. When you touch the [Confirm] button, the setting contents are determined.



3. If you touch the ☒ button without touching the [Confirm] button, the dialog box on the left is displayed.

4. After completing the settings for all the items you want to change, close [Video Unit Settings] with the ☒ button.
5. When closing [Multimedia Setting] or [Communication Setting] with the ☒ button, the new setting contents are reflected.

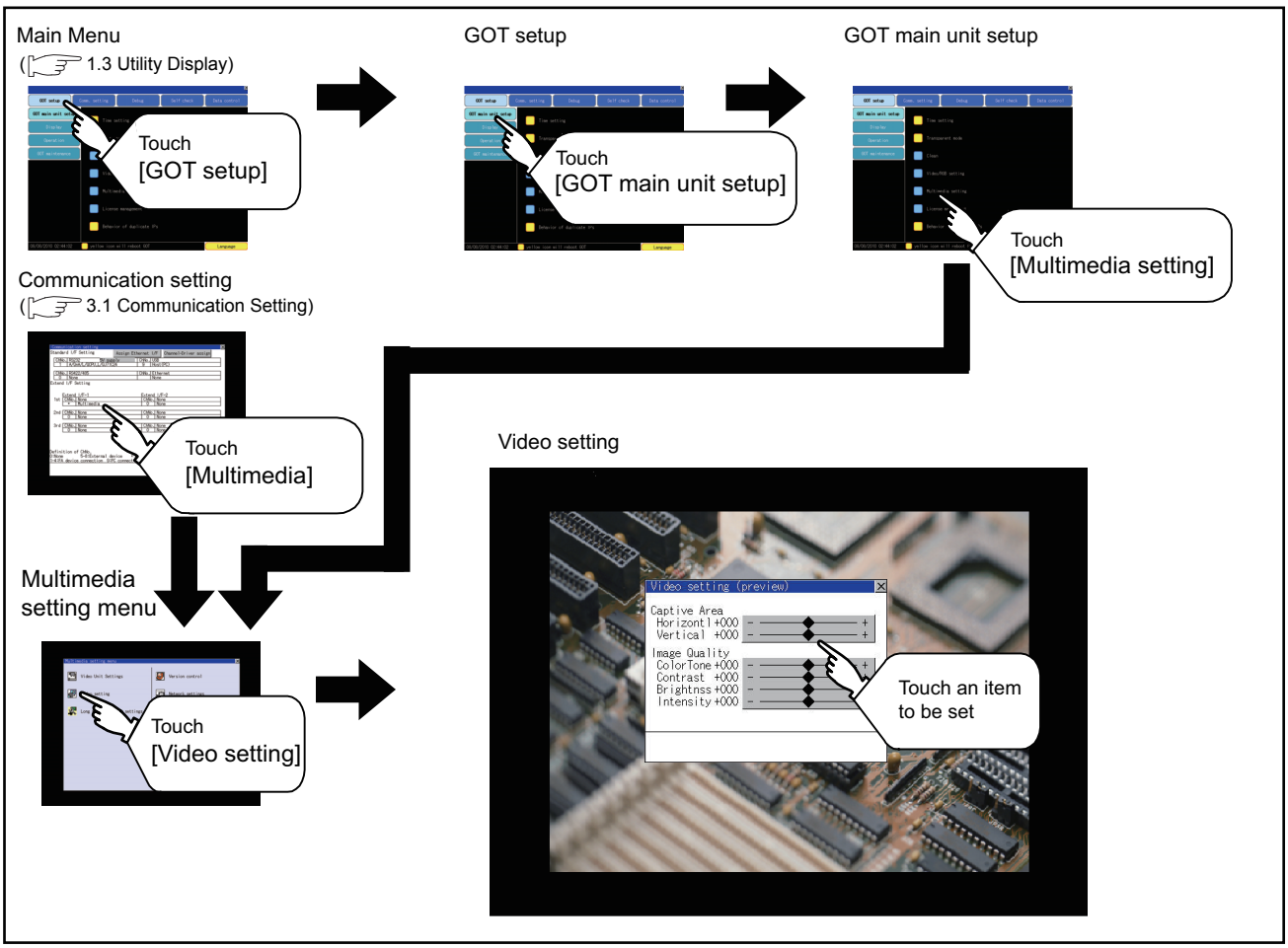
■ Video setting

(1) Function of Video setting

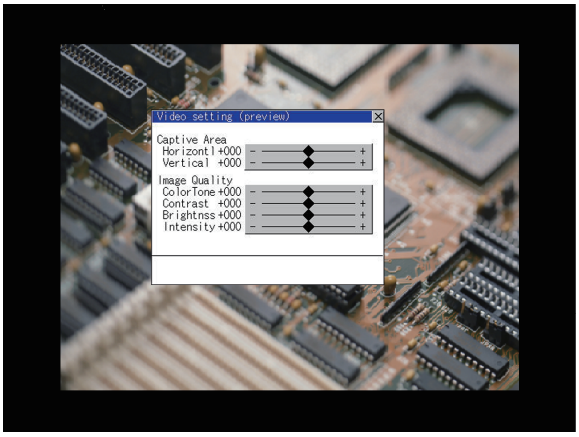
The captive area and image quality can be set.

Item	Description	Setting range	For GT Designer2	For GT Designer3
Video setting	The captive area (in the horizontal direction and vertical direction) for the video and the image quality (color tone, contrast, brightness, color intensity) can be set.	Captive area Horizontal: -100 to 100 <At factory shipment: 0> Vertical: -100 to 100 <At factory shipment: 0> Image Quality and Color Tone: -100 to 100 <At factory shipment: 0> Contrast: -100 to 100 <At factory shipment: 0> Brightness: -100 to 100 <At factory shipment: 0> Intensity: -100 to 100 <At factory shipment: 0>	○	○

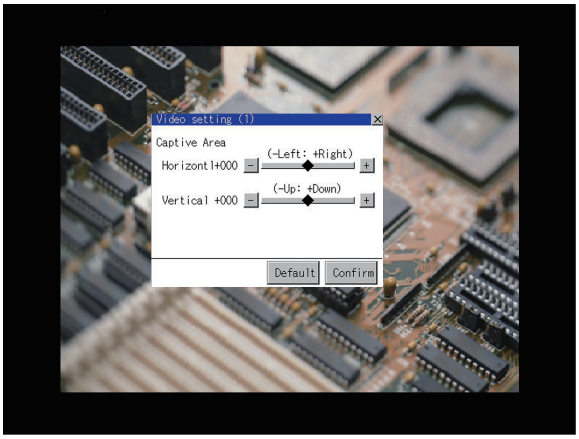
(2) Display operation of Video setting



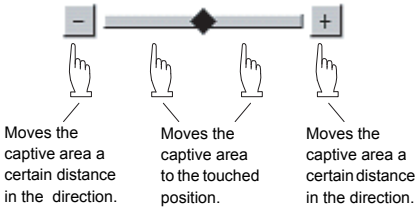
(3) Operation of Video setting



1. To change the captive area or image quality, touch the display section of each item.
   Captive Area : Refer to step2 to step5
   Image Quality : Refer to step6 to step9.

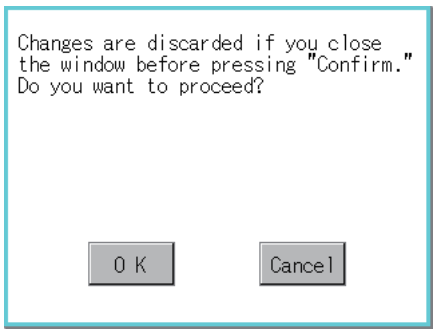


2. The captive area (horizontal direction/vertical direction) can be changed.



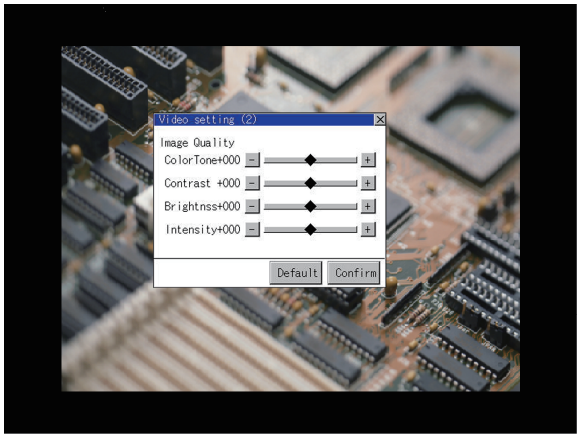
Touching the [Default] button returns to the default status.

3. When touching the [Confirm] button, the setting contents are determined.

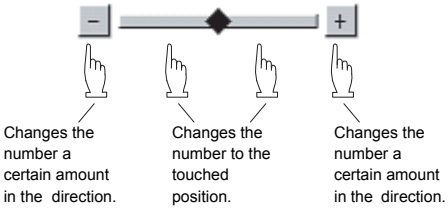


4. If you touch the ☒ button without touching the [Confirm] button, the dialog box on the left is displayed.

5. After completing all the items to set, if you touch the ☒ button, the display returns to the preview screen 1 .

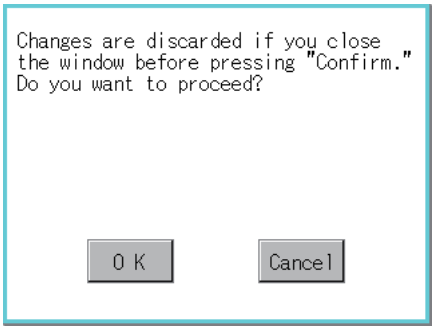


6. The image quality (color tone, contrast, brightness, color intensity) for the selected channel No. can be changed.



Touching the [Default] button returns to the default status.

When touching the [Confirm] button, the setting contents are determined.



7. If you touch the ☒ button without touching the [Confirm] button, the dialog box on the left is displayed.

8. After completing all the items to set, if you touch the ☒ button, the display returns to the preview screen step1.

9. After completing the settings for all the items you want to change in [Video setting], when closing [Video setting (preview)] with the ☒ button, the display returns to [Multimedia setting menu].

POINT

Precautions for setting

Incorrect settings may disrupt or stop the video image.
(If this happens, returning the settings to their default values restores normal display.)
This phenomenon depends on the video camera or other device connected.
Use setting values that provide proper display.

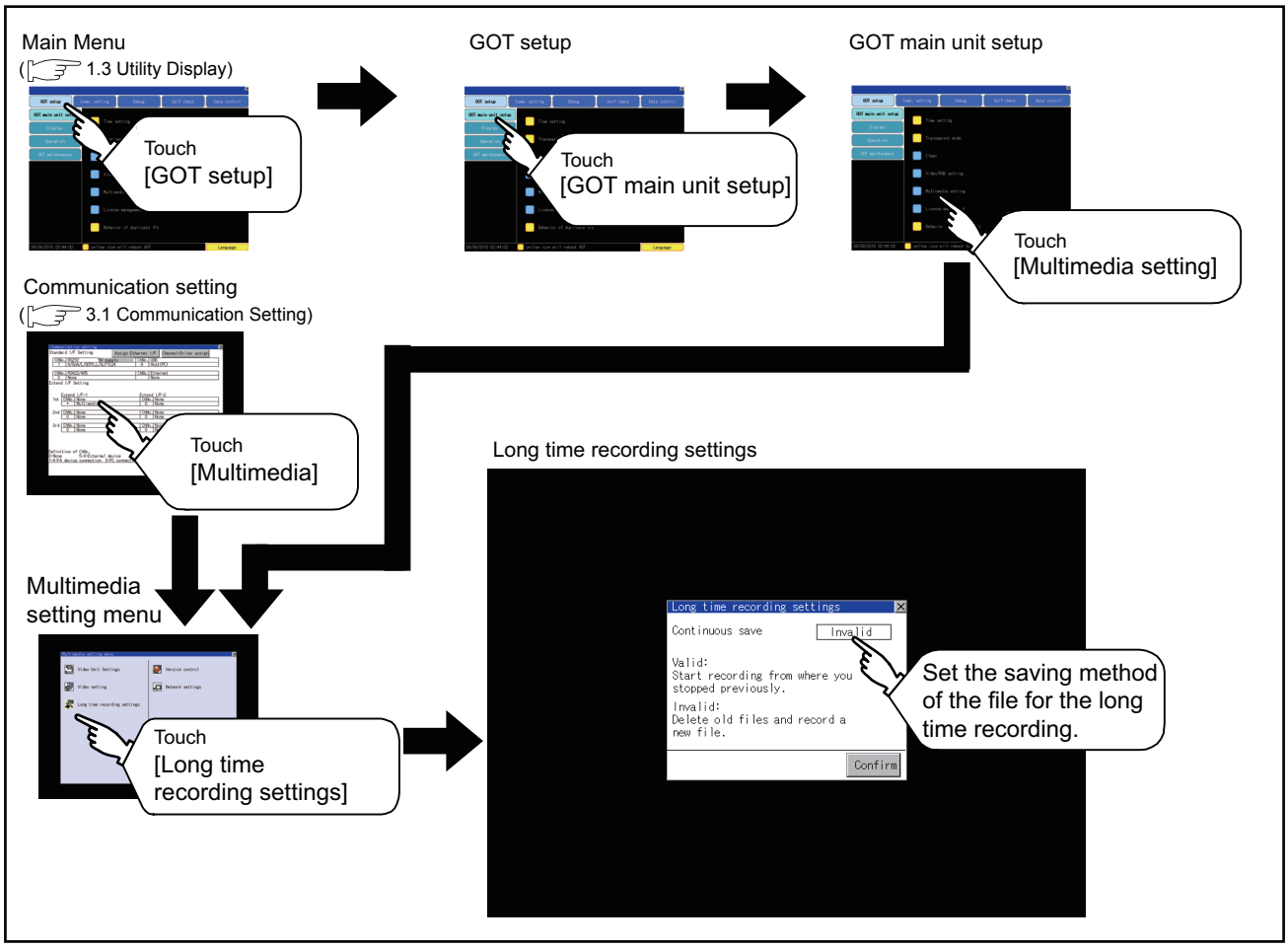
■ Long time recording setting

(1) Functions of long time recording settings

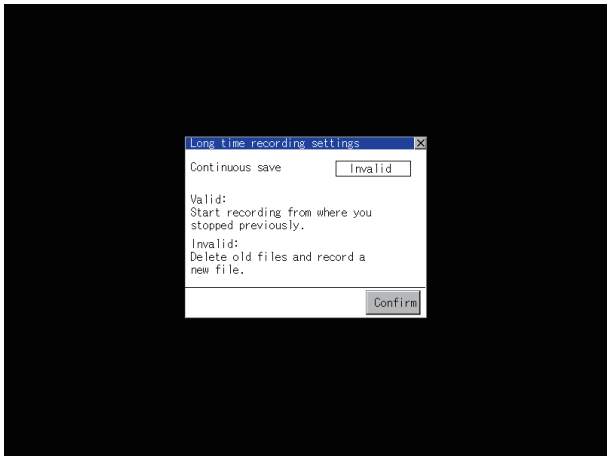
In the long time recording settings, the saving method of video files for long time recording can be set.

Item	Description	Setting range	For GT Designer2	For GT Designer3
Continuous save	At the long time recording, whether to start recording after deleting all the video files which are previously recorded or to start recording without the deletion can be set.	Valid/Invalid <At factory shipment: Invalid>	×	○

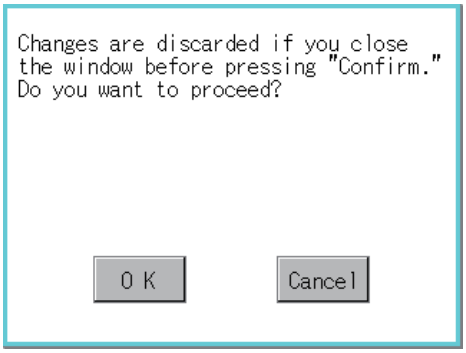
(2) Displaying the long time recording settings



(3) Operating the long time recording settings



1. When you touch the setting item, the setting contents change.
   Continuous save: Valid/Invalid
2. When you touch the [Confirm] button, the setting contents are determined.



3. If you touch the ☒ button without touching the [Confirm] button, the dialog box on the left is displayed.

4. After completing the settings for all the items you want to change, close [Long time recording settings] with the ☒ button.
5. When closing [Multimedia Setting] or [Communication Setting] with the ☒ button, the new setting contents are reflected.

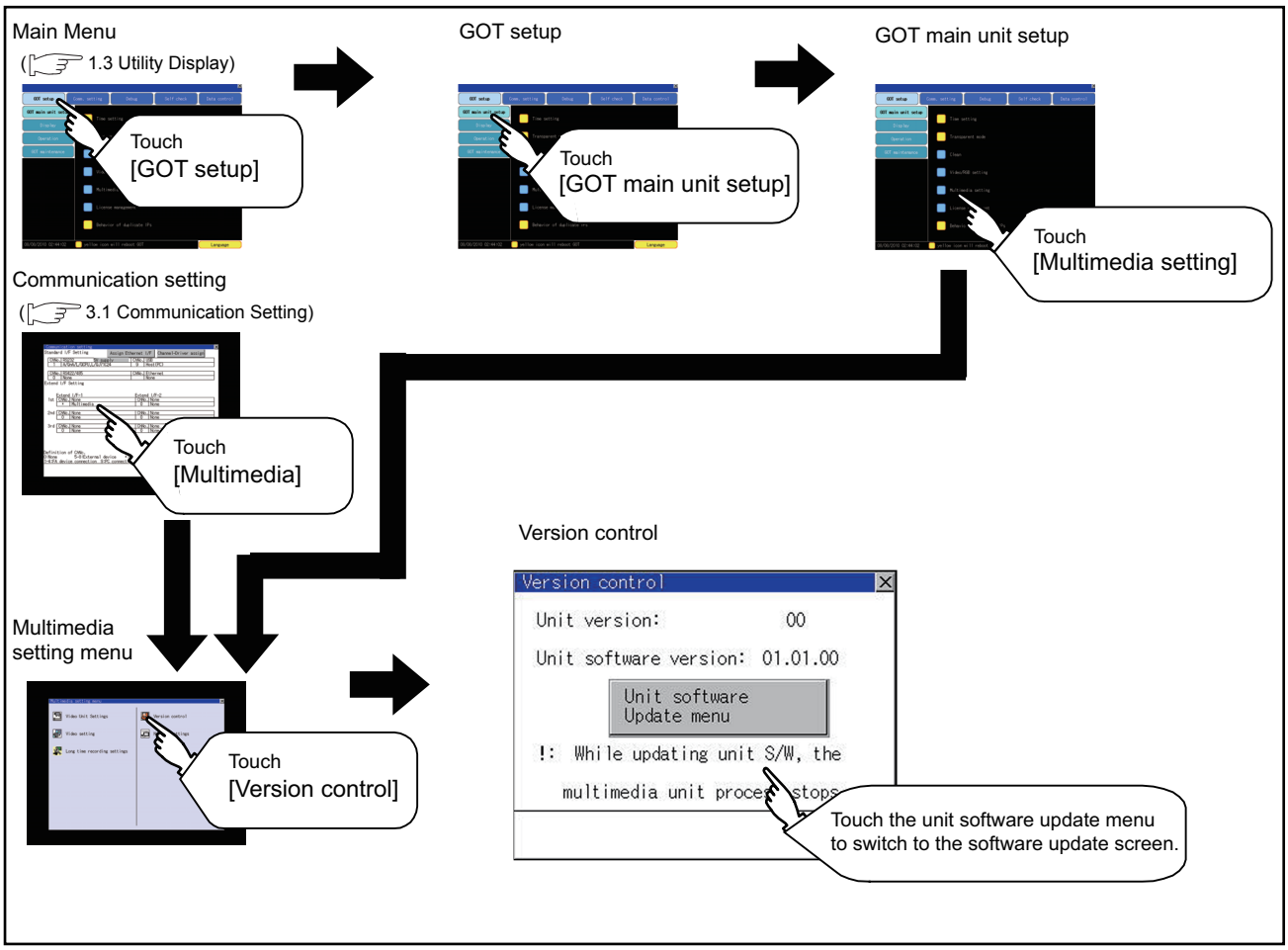
Version control

Version control is executed when the software version of the multimedia unit is upgraded.

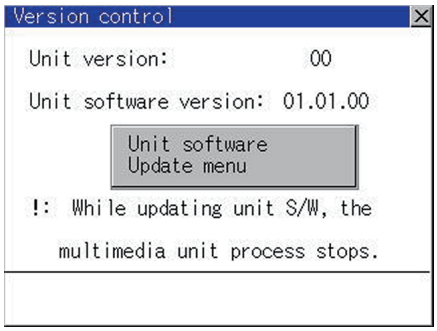
(1) Display operation of multimedia setting version control

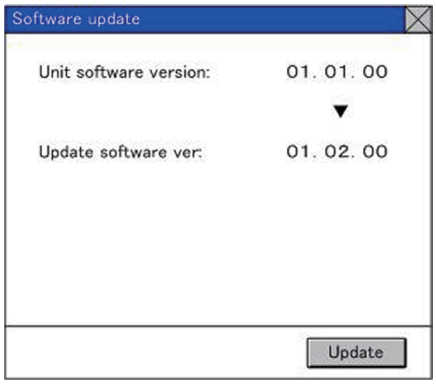
By installing a CF card in which the updated program is stored, the program can be updated.
Prepare the updated program from either of the followings.

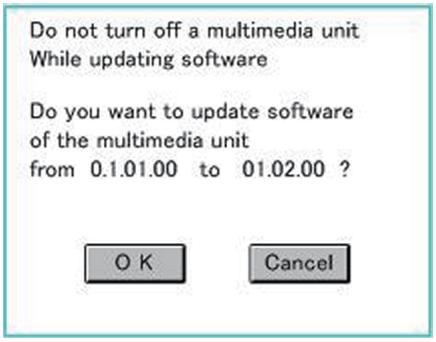
- CD-ROM of GT Works3 or GT Designer2
- Contact your local distributor.



(2) Operation of multimedia setting version control





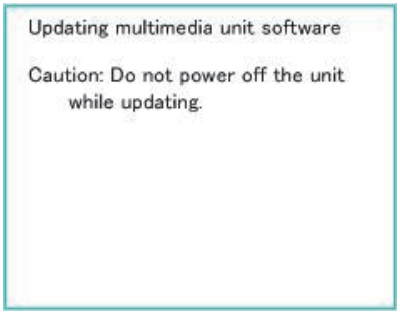


1. Check the version displayed in Unit software version.
   It is the version of the software currently installed in the multimedia unit.
   Touch the [Unit software Update menu] button, and then the update program transfer screen is displayed.

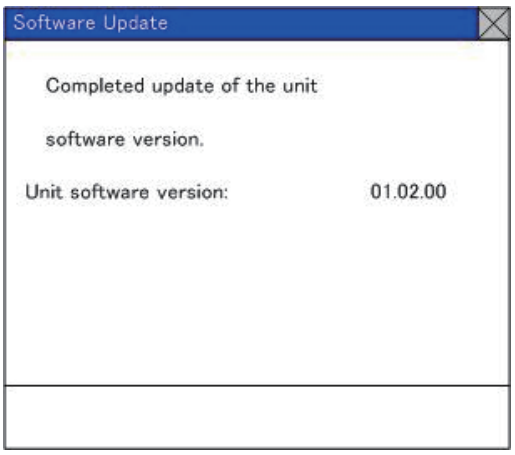
2. By installing a CF card in which the updated program is stored, the program can be updated.
   Only when the updated program newer than the unit software version is stored, the version of newer updated program is displayed in Update software version.

3. To update the program to the new version, touch [Update] button

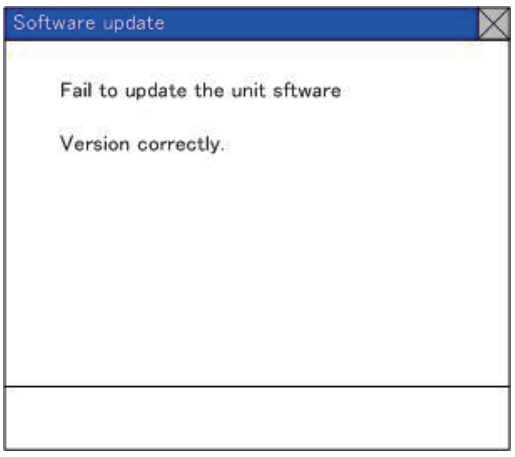
4. The dialog shown left is displayed.
   Touch [OK] button, and then the software is updated.
   Touch [Cancel], and then the software is not updated.



5. The dialog box shown left is displayed during the update of update program.
Do not pull out the CF card or power OFF the GOT while the dialog box shown left is displayed.
Do not turn off the CF card access switch of the multimedia unit.
The software is not updated properly.



6. When the update of update program is completed normally, the dialog box shown left is displayed.



7. When the update program is not correct or the update of update program failed, the dialog box shown left is displayed.
After restarting the GOT, apply the steps starting from step1 again.

■ Network setting

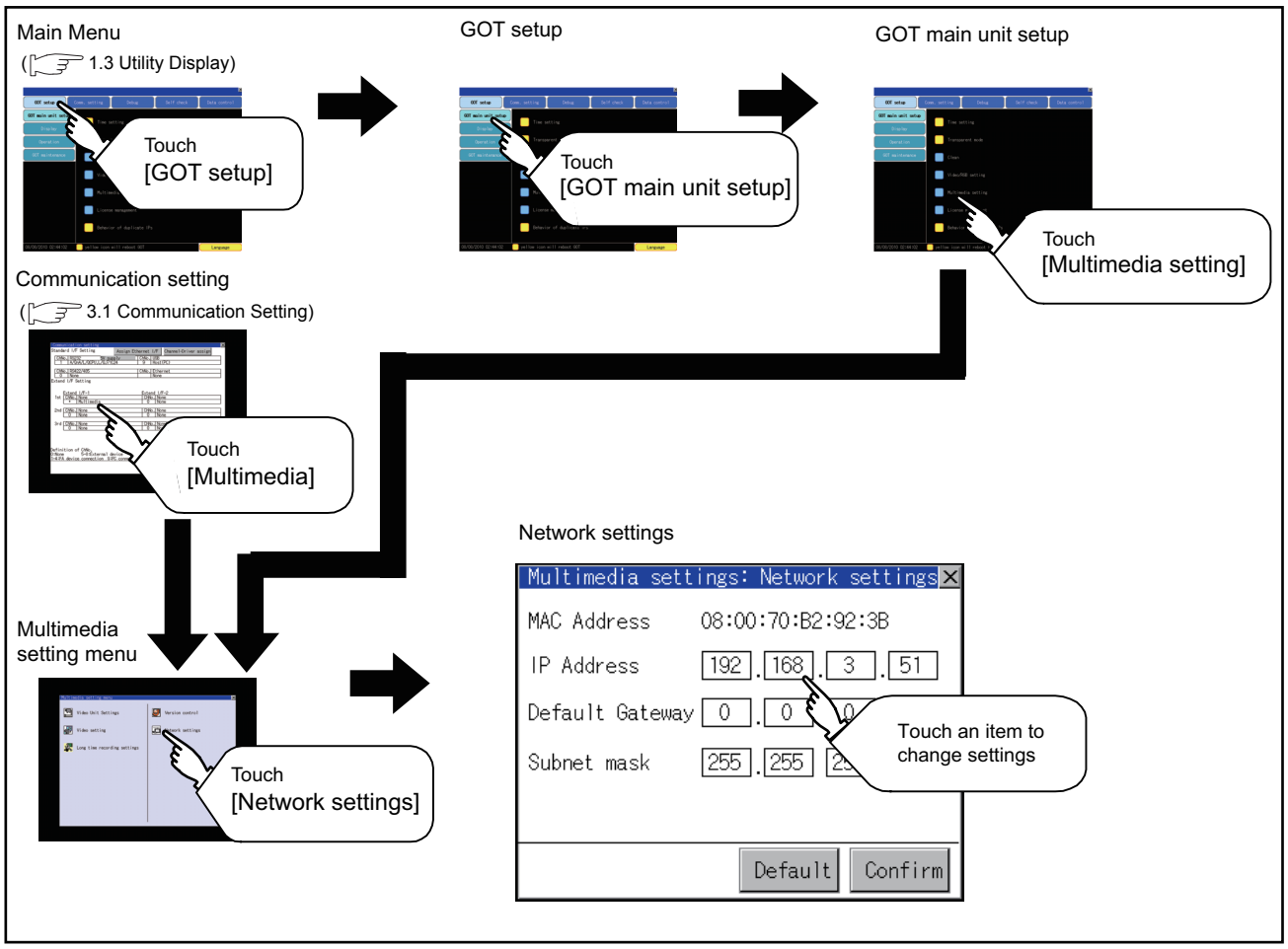
The network setting is executed when the network connection is made using the Ethernet I/F of the multimedia unit.

(1) Functions of the network setting

The following settings can be made in the network setting.

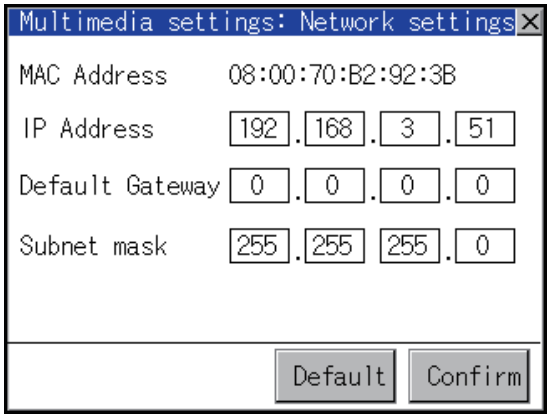
Item	Description	Setting range	For GT Designer2	For GT Designer3
MAC address	Displays the MAC address.	-	○	○
IP address	Displays and sets the IP address.	0.0.0.0 to 255.255.255.255 <Default: 192.168.3.51>	○	○
Default gateway	Displays and sets the router address of the default gateway. For the connection via a router, the setting is required.	0.0.0.0 to 255.255.255.255 <Default: 0.0.0.0>	○	○
Subnet mask	Displays and sets the subnet mask. For the connection via a router, the setting is required.	0.0.0.0 to 255.255.255.255 <Default: 255.255.255.0>	○	○

(2) Displaying the network setting

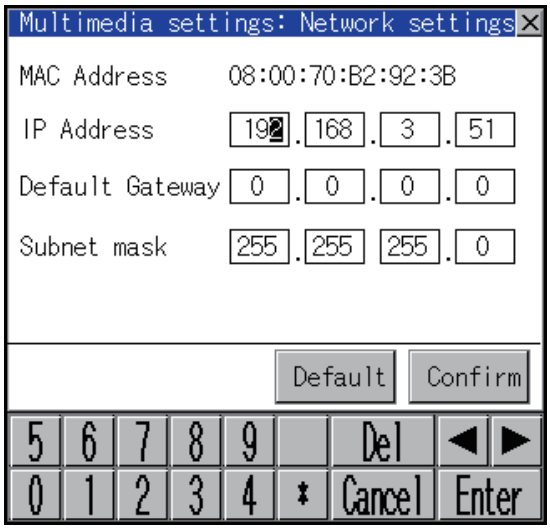


(3) Operating the network setting

The following shows the setting operation of the IP address.
The same setting operation is applied to the default gateway and the subnet mask.

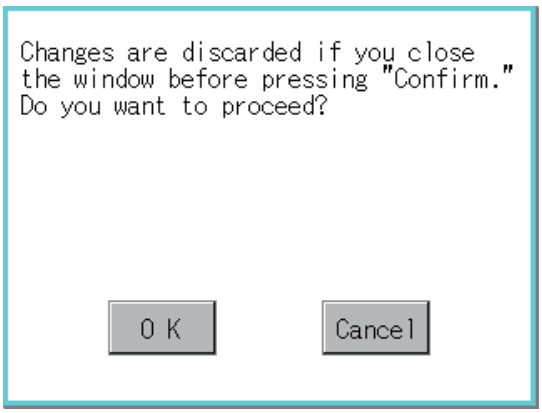


1. Touch the IP address display box.



2. The keyboard appears. Enter numerical values.

3. When you touch the [Confirm] button, the setting contents are determined.
If you touch the [Default] button, the setting contents can be returned to the initial values.



4. If you touch the [Confirm] button without touching the ☒ button, the dialog box on the left is displayed.

5. After completing the settings for all the items you want to change in [Network settings], when touching the ☒ button, the display returns to [Multimedia setting menu].

■ Multimedia screen

(1) Display operation of multimedia screen

Create the multimedia screen switch used to display the multimedia screen on the project screen.
Touch the multimedia screen switch so that the screen is switched to the multimedia screen.
The video image, play video and file selection menu can be switched on the multimedia screen.
For details of the procedures for creating the extended function switch used to display the multimedia screen, refer to the following manual.

☞ •GT Designer3 Version1 Screen Design Manual (Functions)
(2.6 Setting Special Function Switch)

•GT Designer2 Version □ Screen Design Manual
(6.2.5 Setting items of special function switch)

POINT

Play video position display function

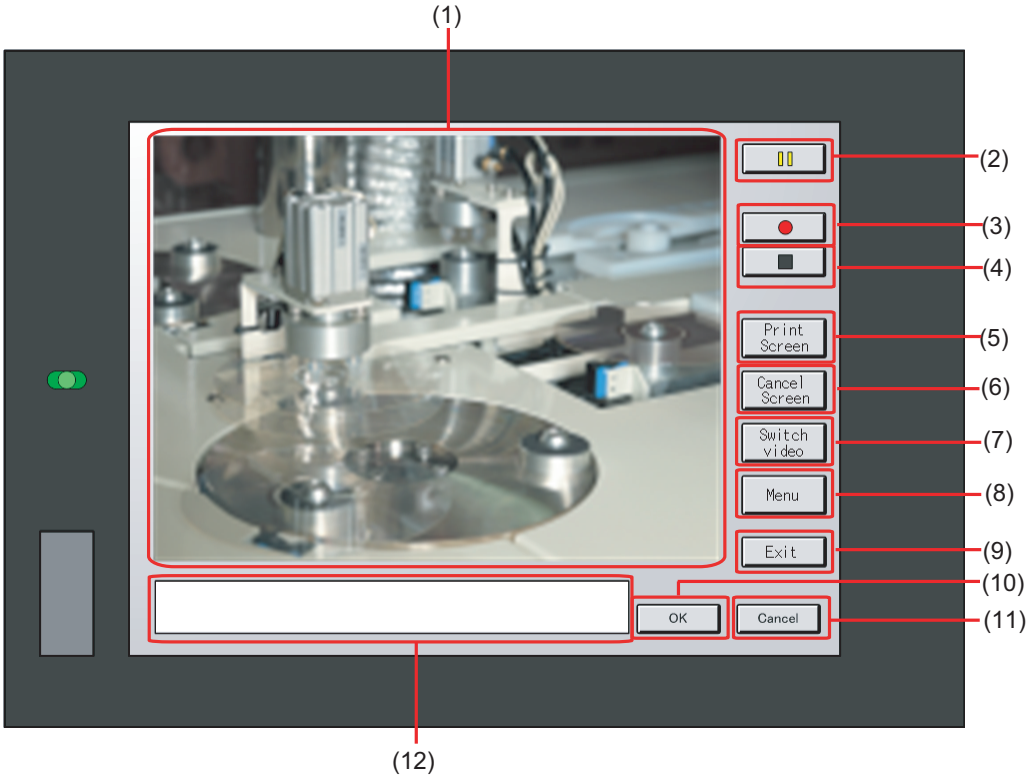
For using the video playing position display function on the play video screen, the software version 03.00.00 or later of the multimedia unit is required.
If the software version of the multimedia unit is old, an error message is displayed.
For how to upgrade the multimedia software, refer to the following.

☞ ■Version control

(2) Operation of multimedia screen

(a) Video image screen

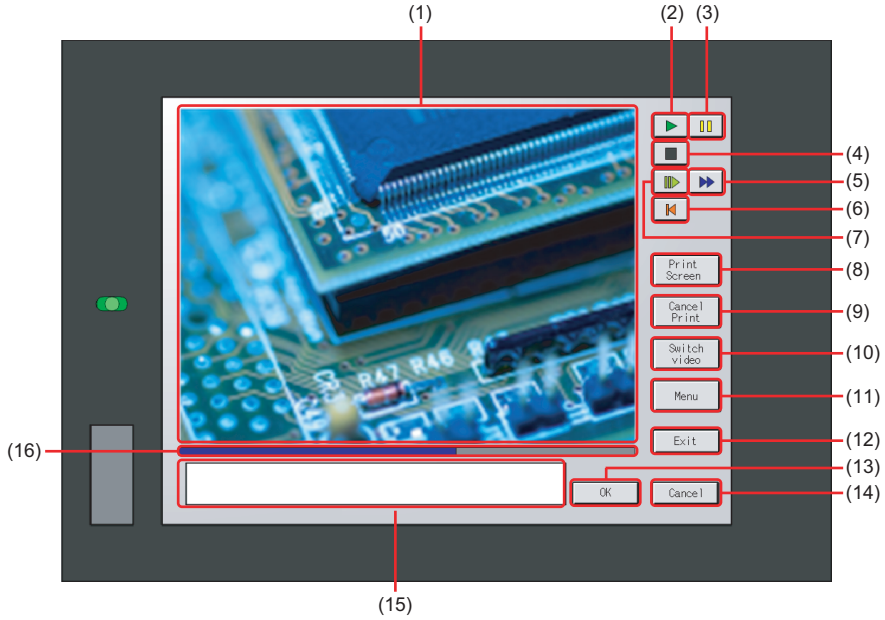
Images taken with a video camera connected to the multimedia unit can be displayed on the GOT screen.
Images taken with a video camera can be recorded.



Number	Item	Description
(1)	Image display screen	Screen to display images taken with a video camera
(2)	button	Button to pause images taken with a video camera
(3)	button	Button to start recording images taken with a video camera
(4)	button	Button to stop recording
(5)	Print Screen button	Button to start printing the screen
(6)	Cancel Screen button	Button to cancel printing the screen
(7)	Switch video button	Button to switch the display to the play video screen
(8)	Menu button	Button to switch the screen to the file menu screen
(9)	Exit button	Button to exit the multimedia screen switch and to return to the utility screen
(10)	OK button	Button to accept messages
(11)	Cancel button	Button to stop messages
(12)	Message display screen	Screen to display error messages, etc.

(b) Play video screen

Video files saved in the CF card installed on the multimedia unit can be played and displayed.

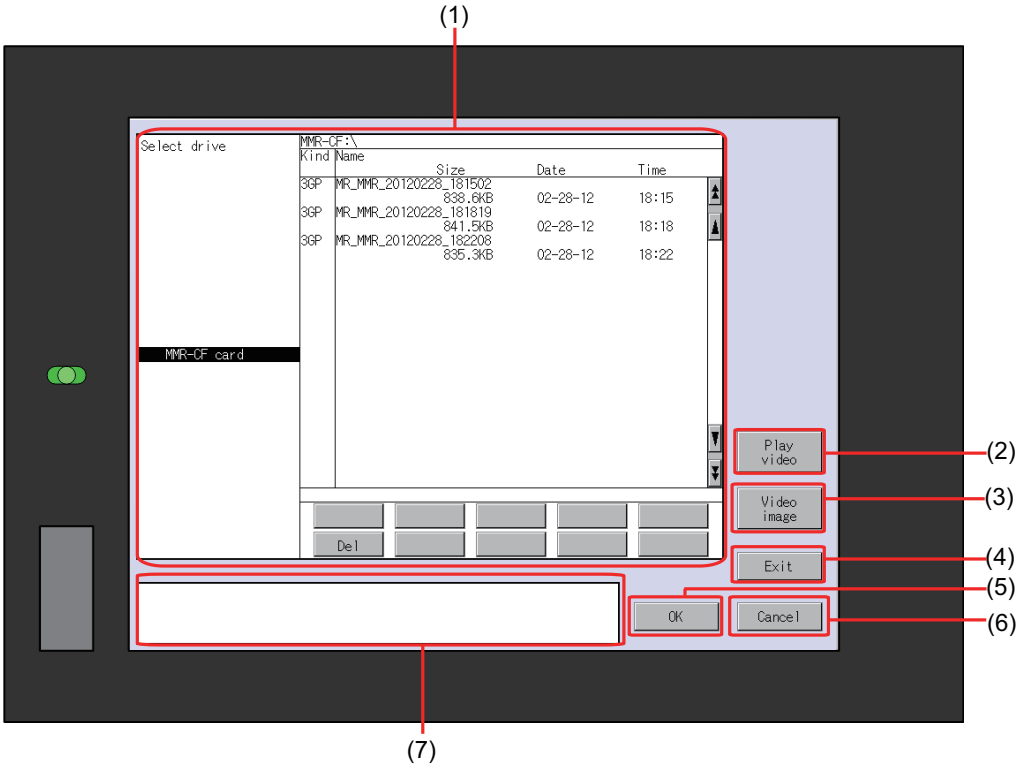


Number	Item	Description
(1)	Image display screen	Screen to display images taken with a video camera or to play video taken with a video camera
(2)	button	Play button for playing video
(3)	button	Button to pause images or video taken with a video camera
(4)	button	Button to stop playing
(5)	button	Button to return to the beginning of video files and to play the video
(6)	button	Button to return to the beginning of video files and to play the video
(7)	button	Button to play the video in slow motion
(8)	Print Screen button	Button to start printing the screen
(9)	Cancel Screen button	Button to cancel printing the screen
(10)	Switch video button	Button to switch the display to the video image screen
(11)	Menu button	Button to switch the display to the video image screen
(12)	Exit button	Button to exit the multimedia screen switch and to return to the utility screen
(13)	OK button	Button to accept messages
(14)	Cancel button	Button to stop messages
(15)	Message display screen	Screen to display the file name and shooting time of the video being played and messages*1
(16)	Play position display bar	Bar to display the play position of the video

*1 This screen displays the shooting time of a video file saved with the GOT (unit software version 03.02.00 or later only).

(c) File menu screen

Video files of the CF card installed on the multimedia unit can be searched.
Searched video files can be displayed on the play video screen.



Number	Item	Description
(1)	File menu display screen	Screen to display video files in the CF card selected by Select drive or to delete video files.
(2)	Play video button	Button to switch the display to the play video screen
(3)	Video image button	Button to switch the display to the video image screen
(4)	Exit button	Button to exit the multimedia screen switch and to return to the utility screen
(5)	OK button	Button to accept messages
(6)	Cancel button	Button to stop messages
(7)	Message display screen	Screen to display error messages, etc.

2.1.6 License management

For using functions which require a license, register the license for the GOT.
For releasing a registered license for the GOT, also execute on the license management screen.

Item	Description	Setting range	For GT Designer2	For GT Designer3
PC Remote Operation function (Ethernet)	Registers and deletes the license of the PC Remote Operation function (Ethernet).	-	×	○
VNC server function	Registers/deletes the license of the VNC® server function.	-	×	○

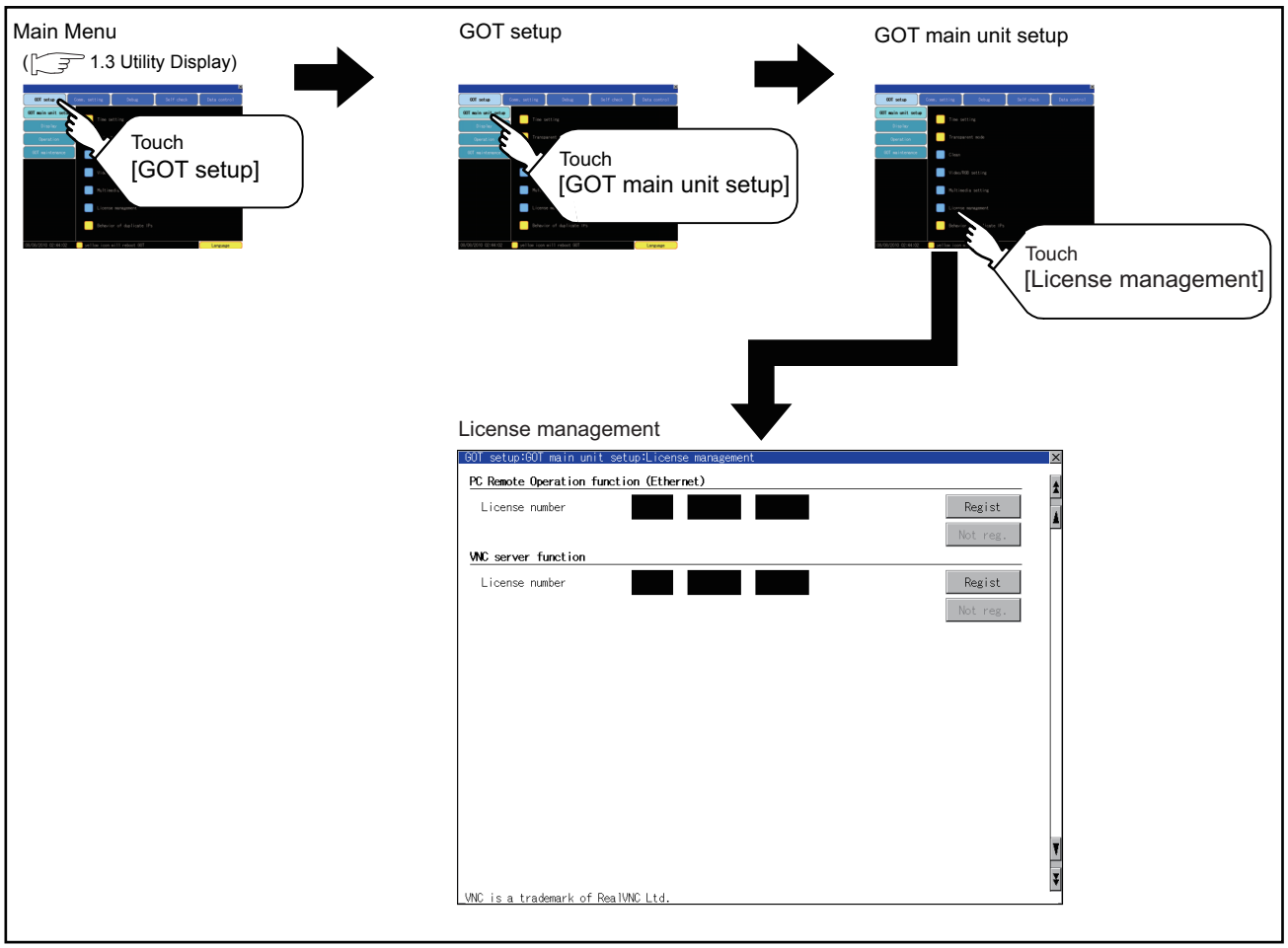
■ License management function

For the remote personal computer operation function (Ethernet) and the VNC® server function, the license registration and the cancellation of the license registration are available.
The GT1675-VN, GT1672-VN, and GT1662-VN do not support the remote personal computer operation function (Ethernet).

For details of the remote personal computer operation function (Ethernet) and the VNC® server function, refer to the following.

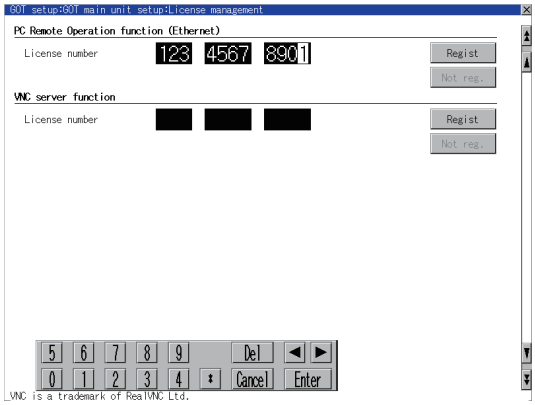
☞ GT Designer3 Version1 Screen Design Manual (Functions)

■ Display operation of license management



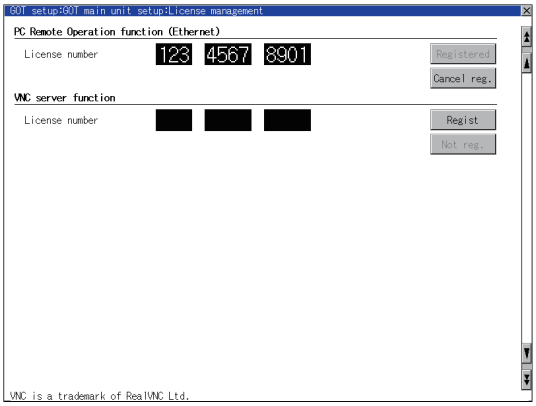
Setting operation of license management

(1) When registering a license number for the GOT



1. Touch the license number input area on the license management screen, and then the keyboard appears on the bottom of the screen.
2. Touch the [Regist] button to register the input license number.
   If the ☒ button is touched without touching the [Regist] button, the license number is not registered.
3. After a license number is registered, touch the ☒ button to close the license management screen.

(2) When releasing a license number for the GOT



1. Touch the [Cancel reg.] button to release the registered license number.
2. Touch the ☒ button to close the license management screen.

POINT

How to acquire a license number

For how to acquire a license number, please consult your local Mitsubishi (Electric System) Service center or representative.

2.1.7 Behavior of duplicate IPs

■ Setting function for Behavior of duplicate IPs

The GOT operation can be set when a device with the same IP address as that of the GOT is added to the network afterwards.

Items	Description	Setting range	For GT Designer2	For GT Designer3
Behavior when a device of the same IP address as the GOT's address joins the network	The GOT operation can be set when a device with the same IP address as that of the GOT is added to the network afterwards.	Maintain a network connection (rec)/Do not maintain a network connection <Default: Maintain a network connection (rec)>	×	○

POINT

(1) For checking IP address duplication

Use CoreOS with the version 05.10.00AG or later.

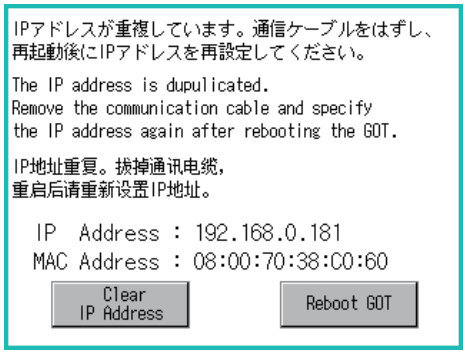
(2) When the IP address duplication is not checked

(a) When the IP address of the GOT is set to 192.168.0.18, the IP address duplication check is not performed.

(b) Depending on the device to connect with the GOT, the IP address duplication check may not be performed.

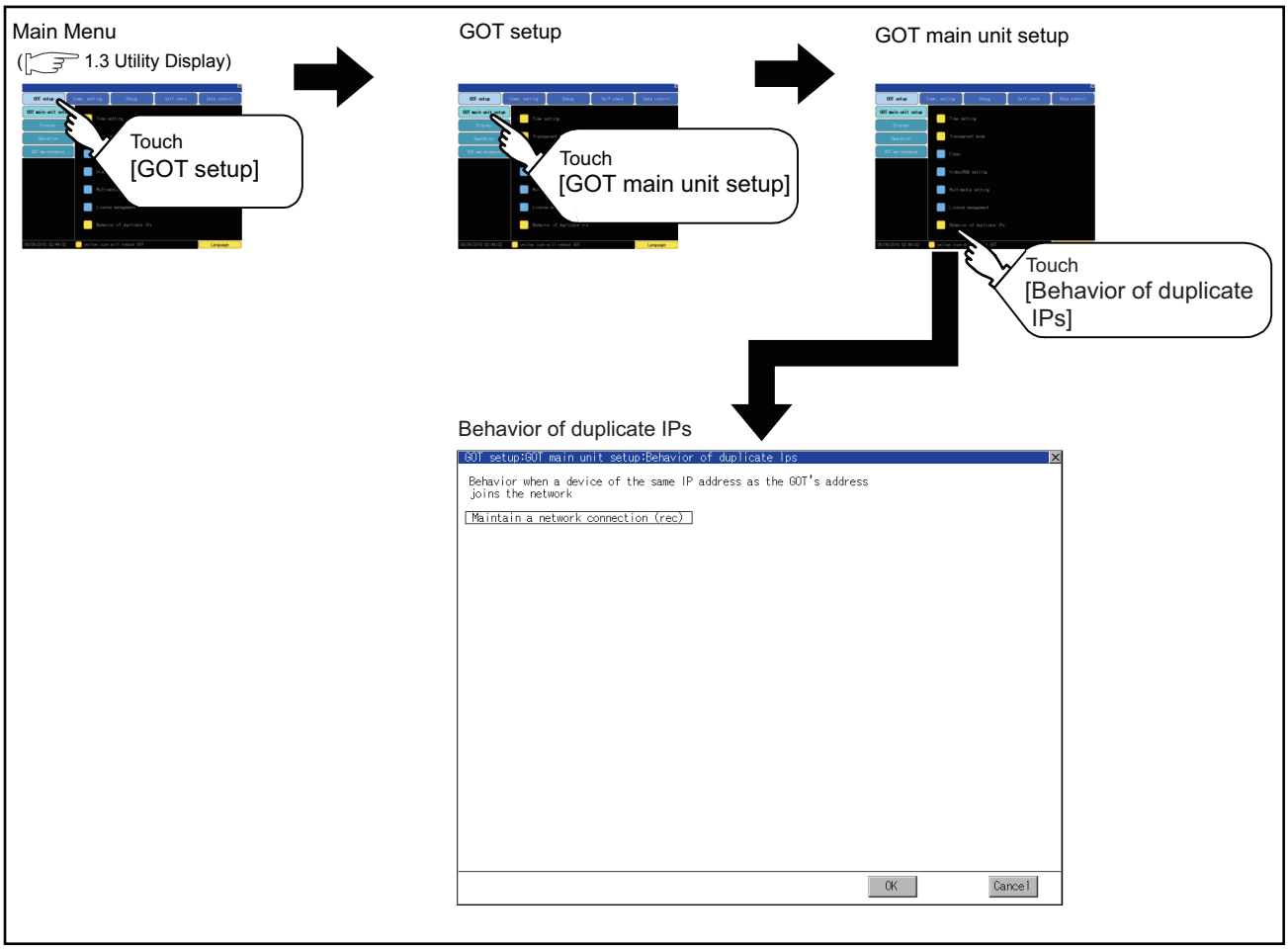
(3) When the GOT is added to the network in which a device with the same IP address as that of the GOT exists

GOT goes into offline status and the following dialog box appears.

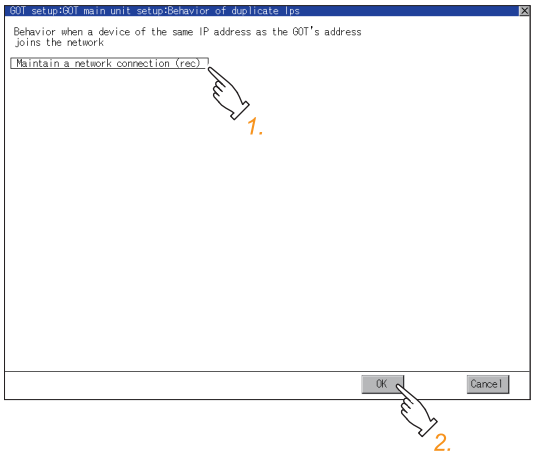


- When correcting the same IP address of other device as that of GOT
  After correcting the same IP address of other device as that of GOT, touch the [Reboot GOT] button to restart the GOT.
- When changing the IP address of GOT
  Touch the [Clear IP Address] button to clear the IP address of GOT.
  After touching the [Reboot GOT] button to restart the GOT, change the IP address of GOT by the utility.

■ Display operation of Behavior of duplicate IPs



■ Setting operation for Behavior of duplicate IPs



1. If touch the setup item, the setup contents is changed.
   - Maintain a network connection (rec):
     The GOT stays connected to the network when a device with the same IP address as that of the GOT is added to the network afterwards. A system alarm occurs.
   - Do not maintain a network connection:
     The GOT is disconnected from the network when a device with the same IP address as that of the GOT is added to the network afterwards.
2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

POINT

(1) Precautions for selecting [Do not maintain a network connection]

When selecting [Do not maintain a network connection], the GOT is disconnected from the network at the addition of a device with the same IP address as the GOT.
Therefore, there is a possibility that the running GOT cannot be communicated by IP address setting mistakes or intended actions by malicious users, and the system control may be influenced by those errors.
Please change the setting of [Behavior of duplicate IPs] after carefully examining the necessity.

(2) Precautions for using a switching hub compatible with the spanning tree protocol

For the switching hub port connected with the GOT, configure the setting (PortFast or others) that makes the GOT be ready for communications (forwarding state). The setting is required to make sure that the delay right after the connection by the spanning tree protocol does not occur.
Without the setting, the Ethernet IP address duplication is not correctly detected.
Additionally, the GOT may not be connected to Ethernet correctly.
For the setting that makes the GOT be ready for communications (forwarding state), refer to the user's manual for the switching hub used.

2.2 Display Settings

2.2.1 Display setting functions

Setting regarding display is possible.
The items which can be set are shown below. When each item part is touched, the respective setting becomes possible.

Items	Description	Setting range	For GT Designer2	For GT Designer3
Language*1	Confirmation of the current language and switching language can be performed regarding with the language displayed by utility and dialog box.	日本語 (Japanese) English (English) 中文(简体) (Chinese (Simplified)) 中文(繁體) (Chinese (Traditional)) 한국어 (Korean) Deutsch (German) <At factory shipment: User's selection>	○	○
Opening screen time	The title display period at the main unit boot can be set.	0 to 60 seconds *2 <At factory shipment: 5 seconds >	○	○
Screen save time	The period from the user stops the touch panel operation till the screen save function starts can be set.	0 to 60 minutes <At factory shipment: 0 minutes>	○	○
Screen save backlight	Whether turn ON or OFF the backlight simultaneously at the screen save function start can be specified.	ON/OFF <At factory shipment: OFF>	○	○
Battery alarm display	Whether to display system alarm when the voltage of the GOT internal battery has dropped can be specified.	<At factory shipment: OFF>	○	○
Brightness, Contrast	The brightness can be adjusted. ☞ 2.2.4 Brightness, contrast adjustment	—	○	○
Human sensor	Screen saver status cancel by human sensor can be set to Effective or Invalid.	Effective/Invalid <At factory shipment: Effective>	○	○
Sensor detect level *3	The sensor detect level can be set.	0 to 10 <At factory shipment:10>	○	○
Sensor detect time *3	The time corresponding to the [Sensor detect level] is displayed. (setting is disabled) When the [Sensor detect level] is changed, the corresponding time is reflected by touching [OK] button.	0 to 4 <At factory shipment: 0sec>	○	○
Sensor off delay	The time period from when the human sensor detects no human movement until the Human Sensor Detection Signal (System Signal 2-1.b5) turns OFF can be set.	0Min 10Sec to 60Min 0Sec <At factory shipment:0Min 10Sec>	○	○

*1 Only selectable languages are displayed.
The selectable languages differ depending on the fonts installed in the GOT.
For details of the fonts, refer to the following manual.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals) (2.5 Specifications of Applicable Characters)

•GT Designer2 Version ☐ Screen Design Manual (2.3 Specifications of Applicable Characters)

*2 If setting 0, the title screen is not hidden.
The title screen is always displayed for 4 seconds or longer (which changes depending on the project data contents).

*3 The monitoring time corresponding to the sensor detect level (0 to 10) is as follows.
As the sensor detect level becomes greater, the sensitivity of the human sensor becomes higher.

Sensor detect level	10	9	8	7	6	5	4	3	2	1	0
Sensor detect time [s]	0	0.1	0.2	0.4	0.8	1	1.5	2	2.5	3	4

POINT

(1) Display setting by GT Designer3 or GT Designer2

Set title display period, screen save time and screen save backlight at [GOT set up] in [Environmental Setting] of GT Designer3 or in [System Environment] of GT Designer2.
When change a part of the setting after downloading the project data, change the setting by [Display] screen of the GOT.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.9 GOT Display and Operation Setting)

•GT Designer2 Version ☐ Screen Design Manual
(3.8 Setting of the GOT display and operation (GOT setup))

(2) Screen save time

Using the system information function can compulsorily switch the controller to the screen saving status (Forced Screen Saver Disable Signal) or disable the screen save time (Automatic Screen Saver Disable Signal) set with Utility.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.6 System Information Setting)

•GT Designer2 Version ☐ Screen Design Manual
(3.6 Setting System Information)

(3) Screen save backlight

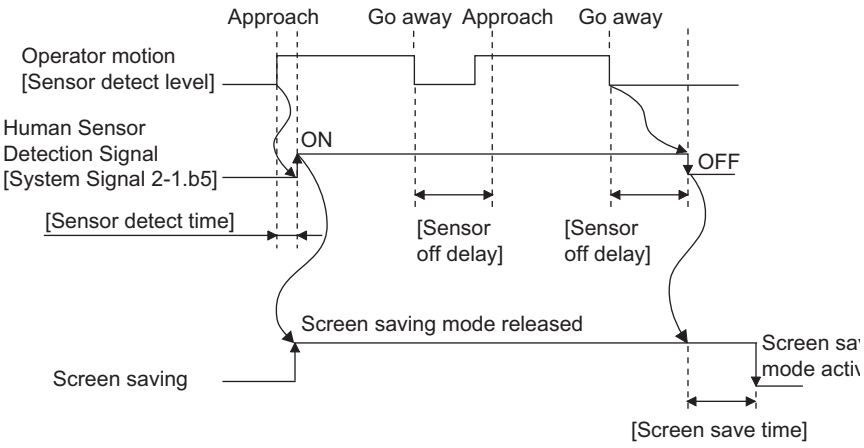
When [Screen save backlight] is set to [ON], using the system information function (Backlight OFF output signal) can switch the backlight OFF from the controller.
When [Screen save backlight] is set to [OFF], the above signal has no effect on the screen save backlight.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.6 System Information Setting)

•GT Designer2 Version ☐ Screen Design Manual
(3.6 Setting System Information)

(4) Display control by human sensor

The human sensor is a function that releases the GOT from the screen saving mode without the necessity to touch the GOT.
This function releases the GOT from the screen saving mode when the operator has come closer to the GOT.



When there is no operator around the GOT for the time set as "Sensor OFF delay", the "Human Sensor Detection Signal" turns OFF.
When the time set as the "Screen save time" elapses after the "Human Sensor Detection Signal" turns OFF, the GOT enters the screen saving mode.

Refer to the following manual for the Human Sensor Detection Signal (System Signal 2-1.b5).

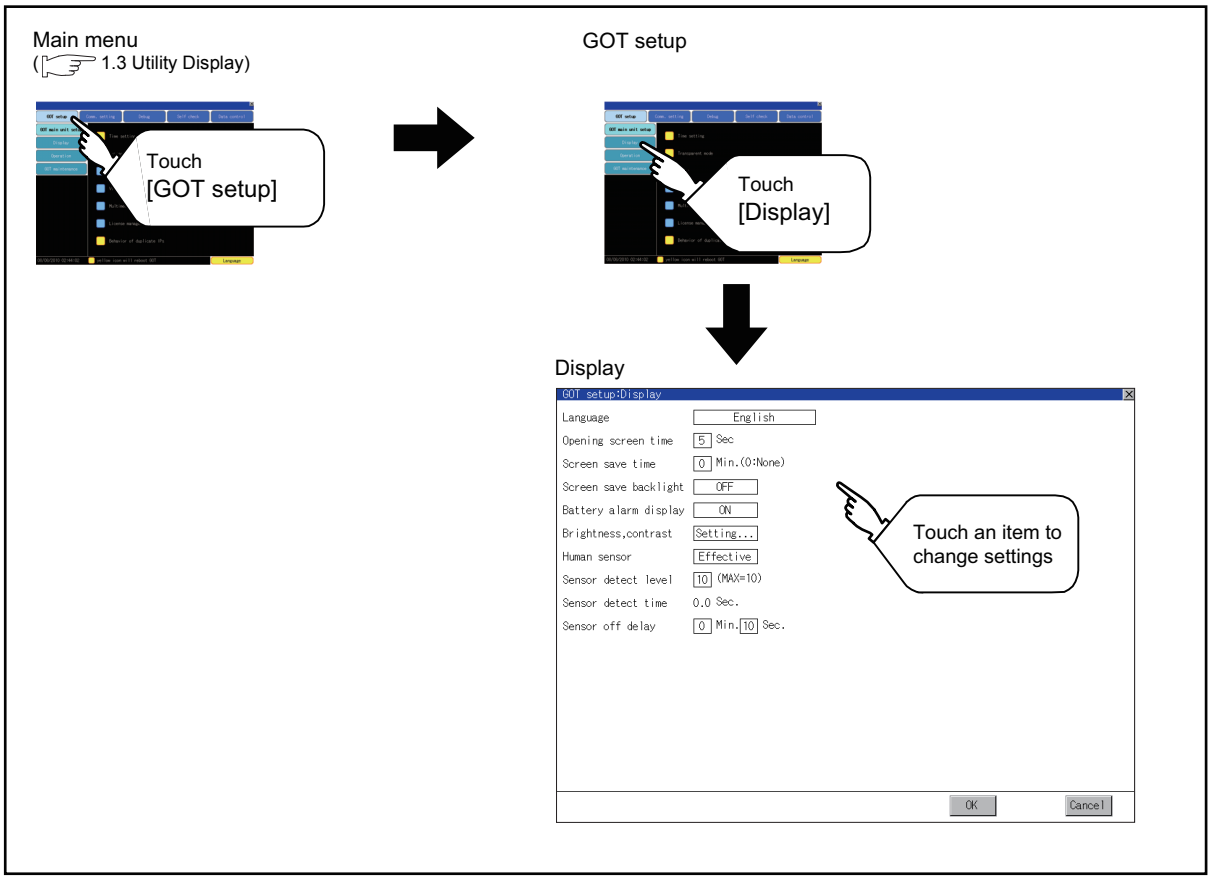
☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.6 System Information Setting)

•GT Designer2 Version ☐ Screen Design Manual (3.6 Setting System Information)

(5) When setting the human sensor to invalid

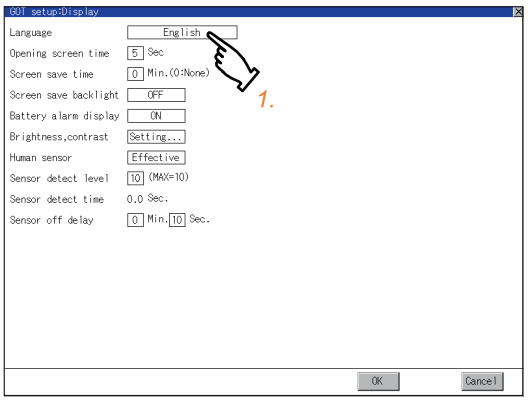
Even if setting the human sensor to invalid by the utility, the Human Sensor Detection Signal (System Signal 2-1.b5) turns ON when the human sensor detects human movement.
Unintended operation may result, therefore, if controlling the Forced Screen Saver Enable Signal (System Signal 1-1.b1) and Human Sensor Detection Signal associating them with each other by a sequence program, etc.
When setting the human sensor to invalid, review the related sequence program, etc.

2.2.2 Display operation of display setting

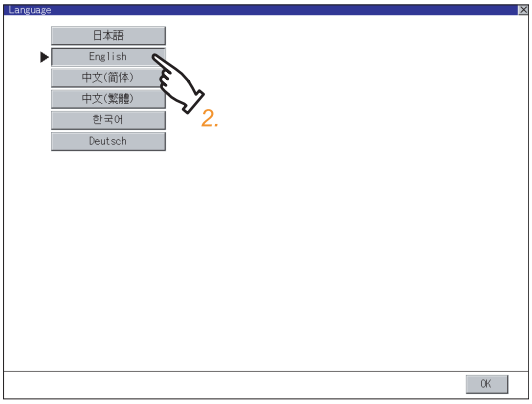


2.2.3 Display setting operations

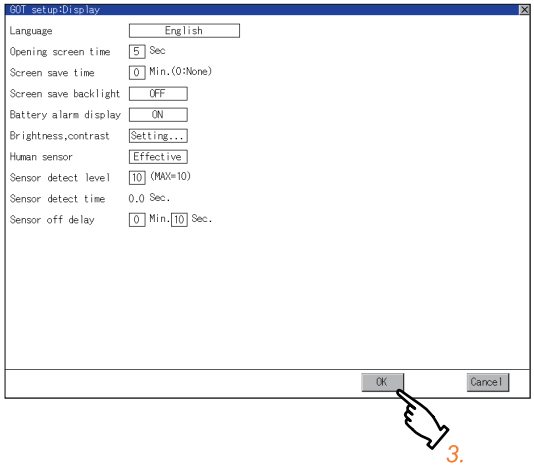
■ Language



1. If the setting item is touched, the Language screen is displayed.



2. If touch the language to be displayed, the language is selected and the screen returns to the [Display] screen.



3. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

HINT

(1) Selectable languages

The system message switch button is displayed only for the selectable languages.
The selectable languages differ depending on the fonts installed in the GOT.
For the relation between the selectable languages and the fonts, refer to the following.

GT Designer3 Version1 Screen Design Manual (Fundamentals) (2.5 Specifications of Applicable Characters)

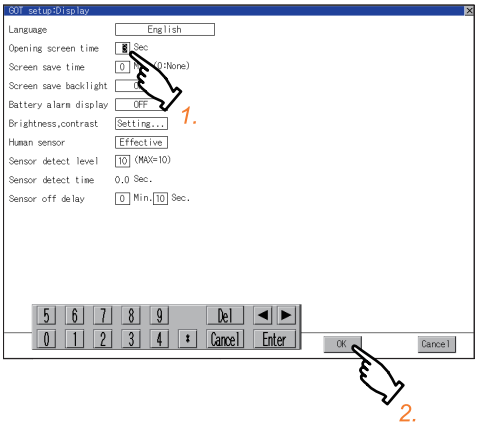
GT Designer2 Version☐ Screen Design Manual (2.3 Specifications of Applicable Characters)

(2) System language switching using the device

The system language can be switched using the system language switching device set with GT Designer3.
For the setting method of the system language switching device, refer to the following.

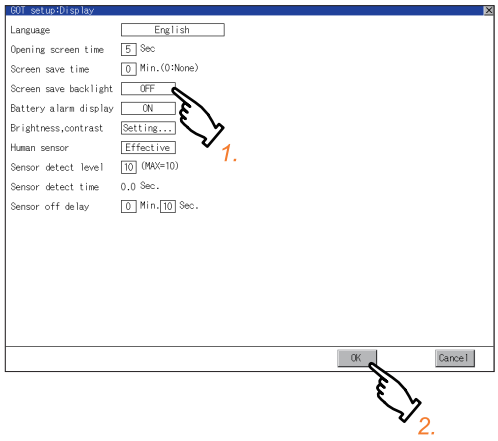
GT Designer3 Version1 Screen Design Manual (Fundamentals) (4.3 Language Switching Device Setting)

■ Opening screen, screen save time



1. If touching the setting (numerical), keyboard is displayed. Input numeric with the keyboard.
2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Screen save backlight, battery alarm display



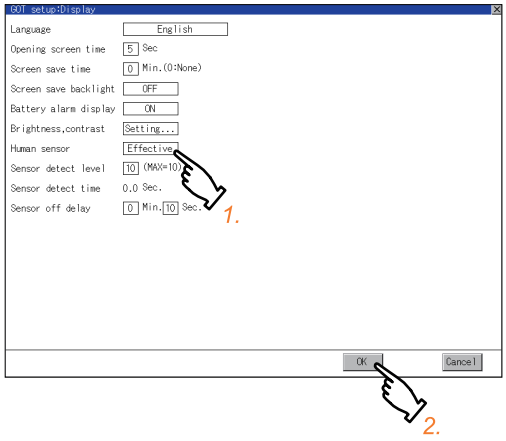
1. Setting item is changed if setting item is touched. (ON ⇄ OFF)
2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Brightness, Contrast

Refer to the following for brightness, contrast setting.

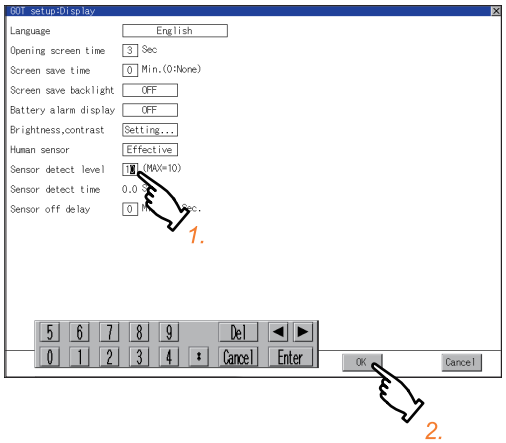
2.2.4 Brightness, contrast adjustment

■ Human sensor



1. Setting item is changed if setting item is touched. (Effective ⇄ Invalid)
2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Sensor detect level, sensor off delay



1. If touching the setting (numerical), keyboard is displayed. Input numeric with the keyboard.
   To move the cursor, touch the ◀ or ▶ button.
2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

2.2.4 Brightness, contrast adjustment

■ Functions of the brightness, contrast

The brightness can be adjusted.

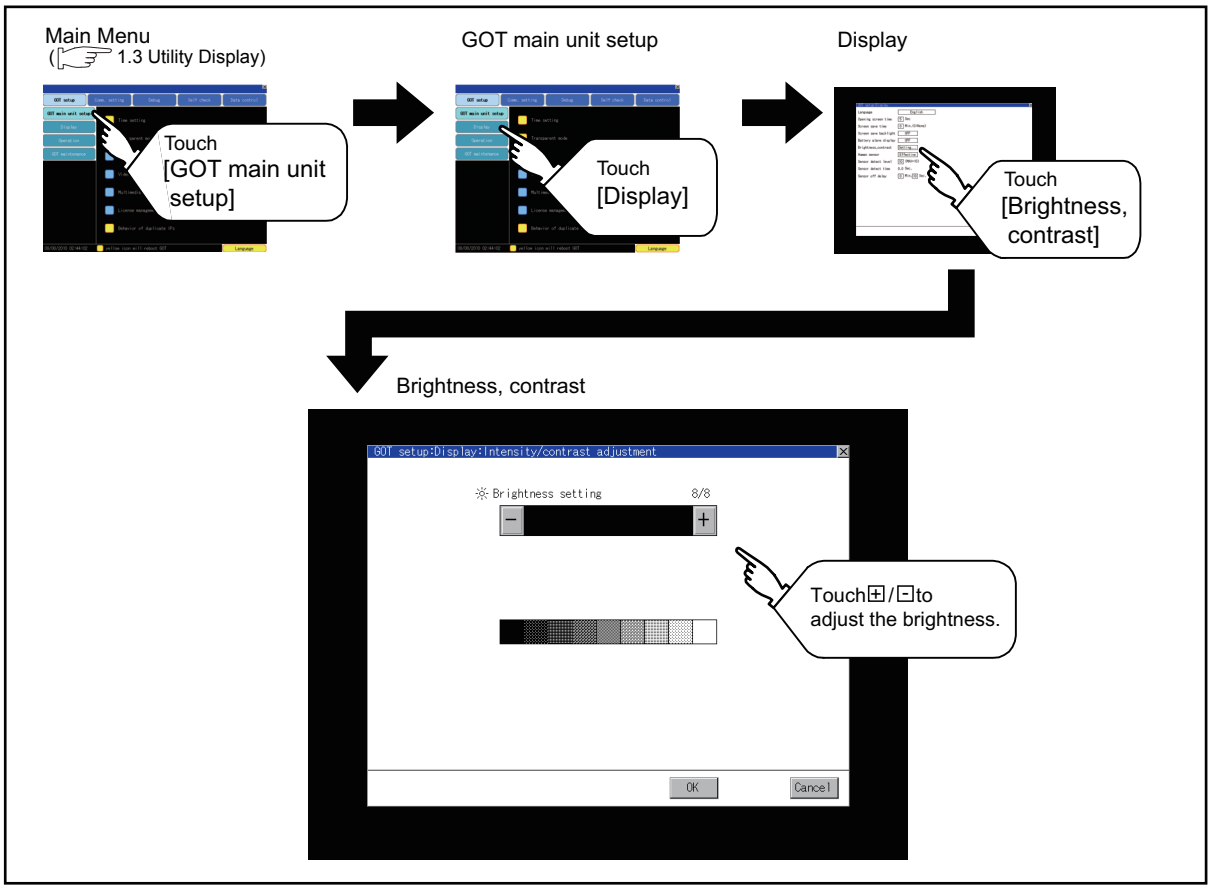
Function	Description	For GT Designer2	For GT Designer3
Brightness setting	Brightness of display part can be adjusted by 8 levels. (GT1675-VN, GT1672-VN, GT1662-VN can be adjusted by 4 levels.)	○	○

POINT

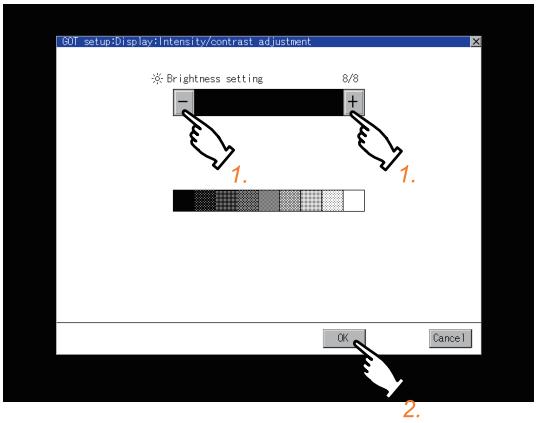
Refer to setting of the brightness by GS

GT Designer3 version1 Screen Design Manual (Fundamentals) App2 GOT internal device

■ Display operation of brightness, contrast



■ Operating the brightness, contrast



1. Brightness can be adjusted by touching [+], [-] key of brightness adjustment.

2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Display] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Display] screen.

2.3 Operation Settings (Settings Regarding Operation)

2.3.1 Operation setting functions

Setting regarding GOT operation can be set.
The items which can be set are described below. If touch the each item part, the respective setting becomes possible.

Function	Description	Setting range	For GT Designer2	For GT Designer3
Buzzer volume setting	Buzzer volume setting can be changed.	OFF/SHORT/LONG <At factory shipment: SHORT>	○	○
Window move buzzer volume setting	Whether turn ON/OFF buzzer when move window can be selected.	ON/OFF <At factory shipment: ON>	○	○
Security setting screen change	Security level change screen can be displayed. ☞ 2.3.4 Security level change	—	○	○
Utility call key screen change	Utility call key setting screen can be displayed. ☞ 2.3.5 Utility call key setting	—	○	○
Key sensitivity setting	The touch panel sensitivity when touching the GOT screen can be set. E.g. a setting can be changed when double-touch is made when touching the GOT screen only once. (For preventing chattering)	1 to 8 *1	○	○
Touch panel calibration	Touch panel reading error can be corrected. ☞ 2.3.6 Adjusting the touch panel position (Touch panel calibration setting)	—	○	○
Touch detection mode	Whether to reduce incorrect inputs (responses of parts other than the touched part) when more than 2 points are touched simultaneously on the GOT or to prioritize response can be selected.	Continuous key input/Avoid input error <Default: Continuous key input>	○	○
USB mouse/ keyboard setting	Set the setting items related with USB mouse/ keyboard. ☞ 2.3.7 USB mouse/keyboard setting	—	×	○
SoftGOT-GOT link function setting	The authorization of the SoftGOT-GOT link function can be set, and the exclusive authorization can be obtained or released. ☞ 2.3.8 SoftGOT-GOT link function setting	—	×	○
VNC® server function setting	The authorization guarantee time for the VNC® server function can be set.	0 to 3600 seconds <At factory shipment: 0 second>	×	○

***1 Relation between the [Key sensitivity] setting and [Key reaction speed]**

The larger the set value in [Key sensitivity] is, the shorter the time taken from touching the touch panel until the GOT responds becomes.
E.g. decrease the value set for [Key sensitivity] when double-touch is made when touching the GOT screen only once. (Decrease the reaction speed.)
The relation between the [Key sensitivity] setting and [Key reaction speed] is as follows.

[Key sensitivity] setting	Quick response ←							→ Slow response
	8	7	6	5	4	3	2	1
[Key reaction speed]	- 20ms	- 10ms	± 0ms (Standard)	+ 10ms	+ 20ms	+ 40ms	+ 80ms	+ 120ms

POINT

Operation settings by GT Designer3 or GT Designer2

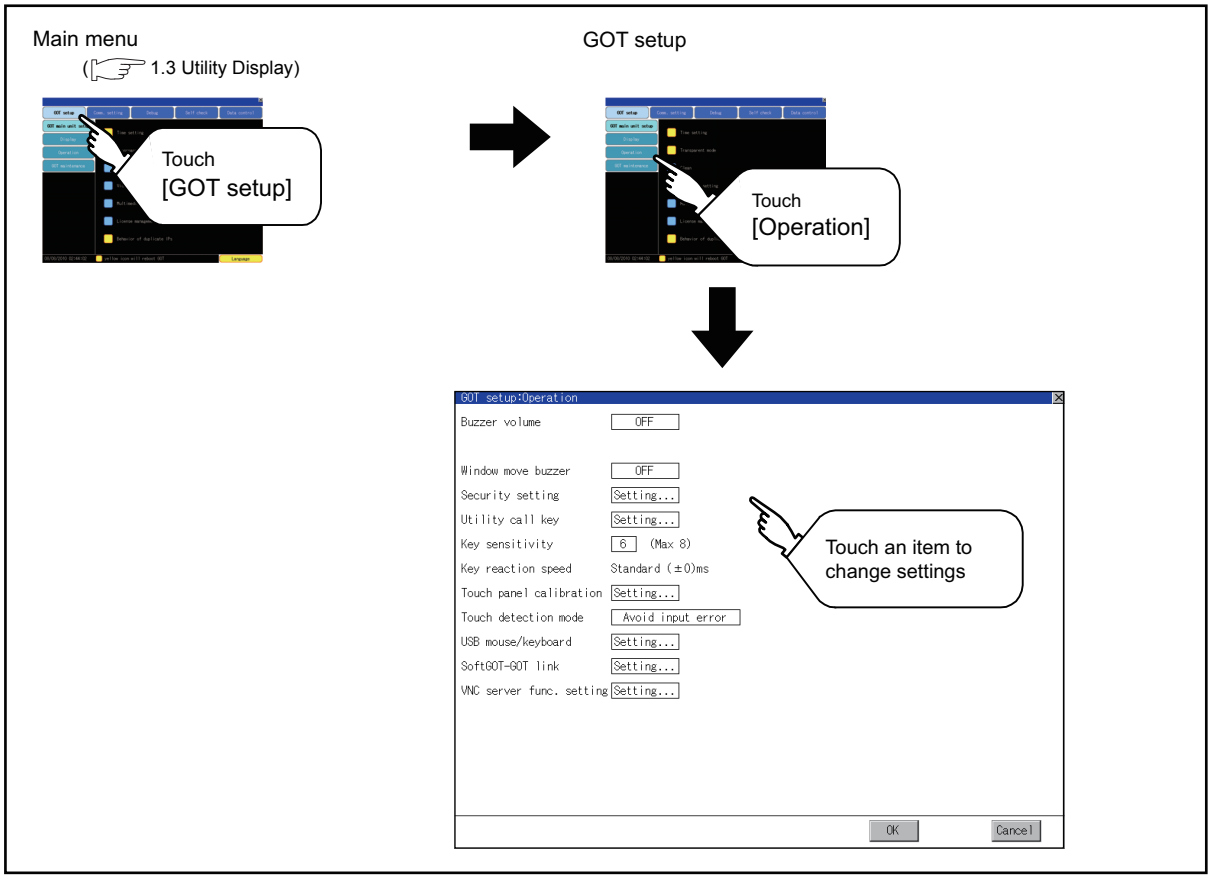
Set buzzer volume and window move buzzer volume by [GOT setup] in [Environmental Setting] of GT Designer3 or in [System Environment] of GT Designer2.

When change a part of the setting, change the setting by the GOT display setting after downloading the project data.

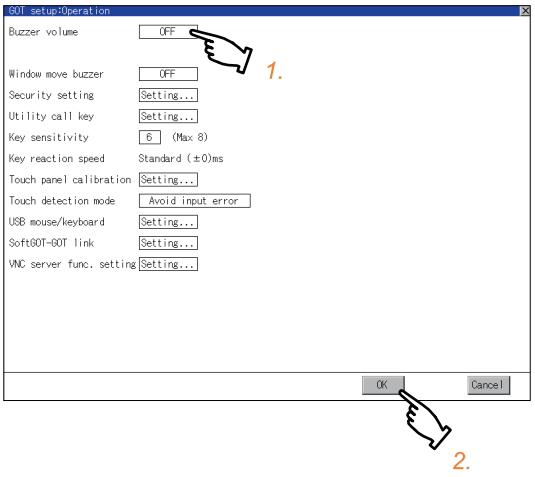
•GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.9 GOT Display and Operation Setting)

•GT Designer2 Version ☐ Screen Design Manual
(3.8 Setting of the GOT display and operation (GOT setup))

2.3.2 Display operation of operation setting



■ Buzzer volume, window move buzzer, Touch detection mode



1. Setting items are changed if setting item is touched.
2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Security setting

Refer to the following for the security setting operation

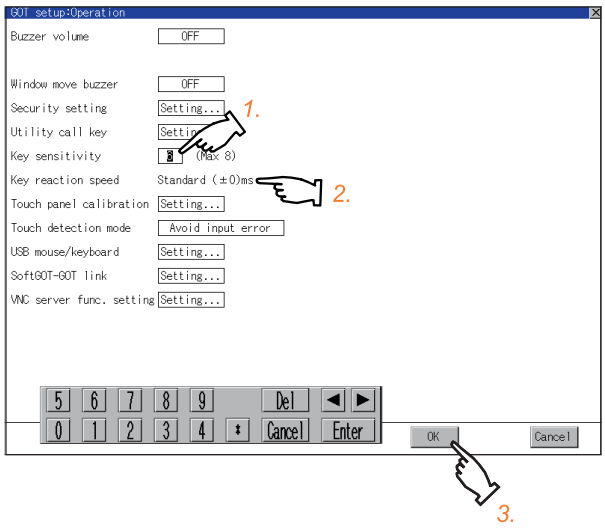
2.3.4 Security level change

■ Utility call key

Refer to the following for the utility call key operation

2.3.5 Utility call key setting

■ Key sensitivity setting



1. If touching the setting items, keyboard is displayed.
   Input numeric with the keyboard.
2. The key response speed corresponding to the [Key sensitivity] setting is displayed.
3. If touch the [OK] button, the GOT restarts and operates with the changed settings.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the Main Menu.

■ Touch panel adjustment

Refer to the following for touch panel adjustment operation.

2.3.6 Adjusting the touch panel position (Touch panel calibration setting)

■ USB mouse/keyboard setting

Refer to the following for the USB mouse/keyboard setting.

2.3.7 USB mouse/keyboard setting

■ SoftGOT-GOT link function setting

Refer to the following for the SoftGOT-GOT link function setting operation.

2.3.8 SoftGOT-GOT link function setting

■ VNC® server function setting

Refer to the following for the VNC® server function setting operation.

2.3.9 VNC(R) server function setting

2.3.4 Security level change

■ Security level change functions

Changes the security level to the same security level set by each object or screen switch.
To change the security level, input the password of the security level which is set in GT Designer3 or GT Designer2.

Security level setting..... ☞
- •GT Designer3 Version1 Screen Design Manual (Fundamentals) (4.7 Security Setting)
- •GT Designer2 Version ☐ Screen Design Manual (5.8 Security function)

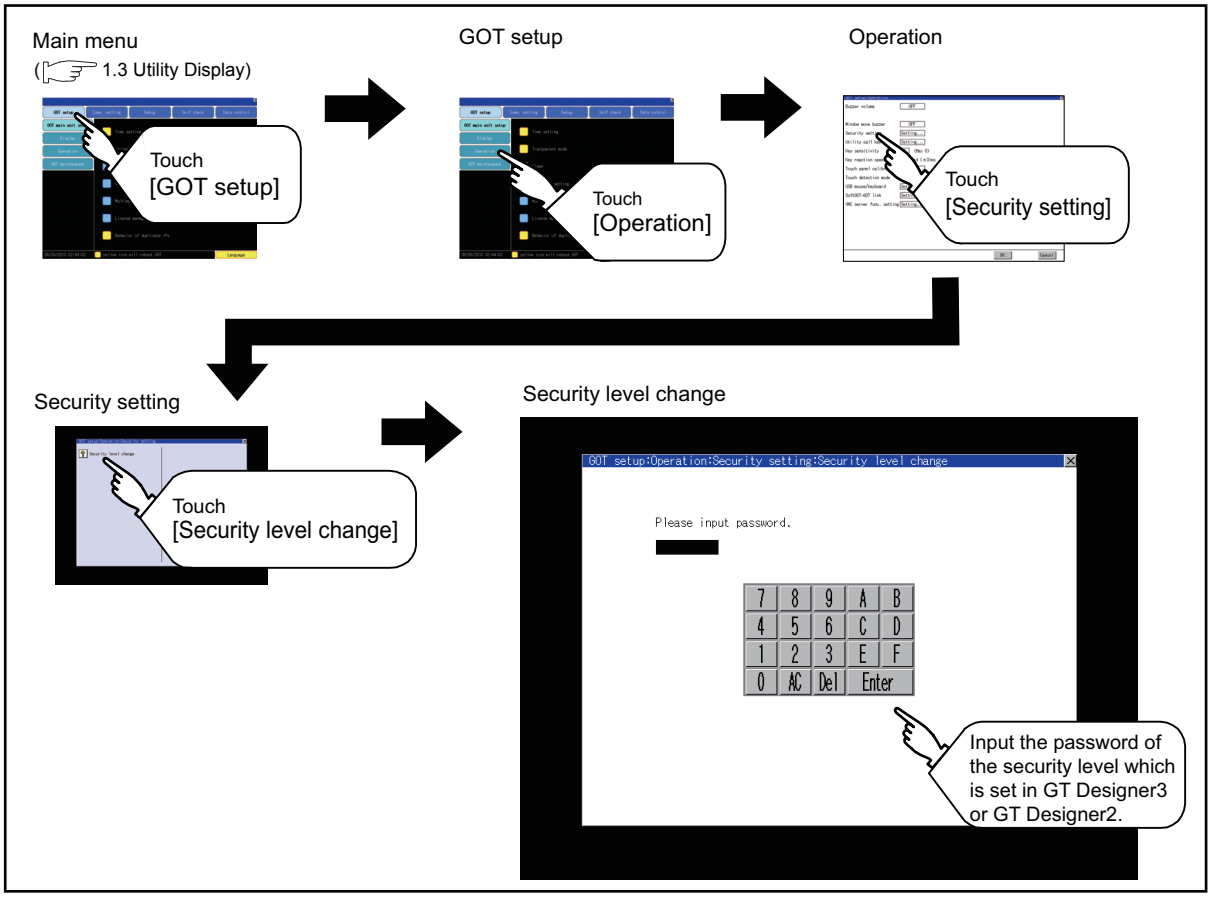
Password setting..... ☞
- •GT Designer3 Version1 Screen Design Manual (Fundamentals) (4.7 Security Setting)
- •GT Designer2 Version ☐ Screen Design Manual (3.5 Set Password)

POINT

Restrictions on screen display

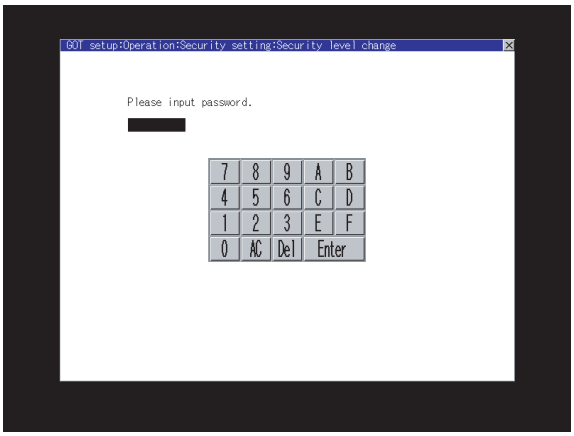
The security level change screen cannot be displayed when project data do not exist in GOT.
Change the security level after downloading the project data to GOT.

■ Displaying the security level change

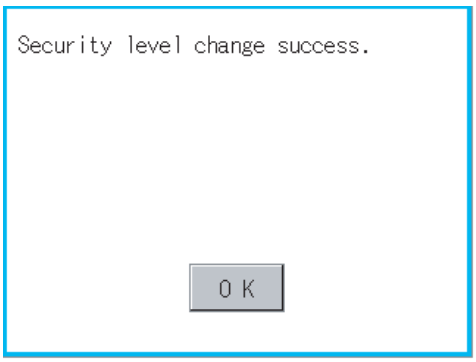


■ Security level change operation

(1) Password input operation



1. By touching [0] to [9], [A] to [F] key, the password of the changed security level is input.
2. When correcting the input character, touch [Del] key to delete the correcting character and input the password again.



3. After inputting password, touch the [Enter] key. When the password matches, the normal completion message is displayed. When the password does not match, an error message is displayed.
4. If [OK] button is touched it returns to the password input screen again.

5. If ☒ button is touched it returns to security setting screen.

HINT

About forgetting to return to the original level after changing security level temporarily

When use GOT after temporarily changing the security level, do not forget to return the security level to the original level.

2.3.5 Utility call key setting

■ Utility call key setting function

The key position for calling the main menu of the utility can be specified.
For the key position, the specification of 1 point from 4 corners on the screen, or no specification, can be set.
(No specification can be set when GT Designer3 is used.)
By keeping pressing the screen, a setting to switch the screen to the utility is available.
This prevents a switching to the utility by an unintentional operation.

POINT

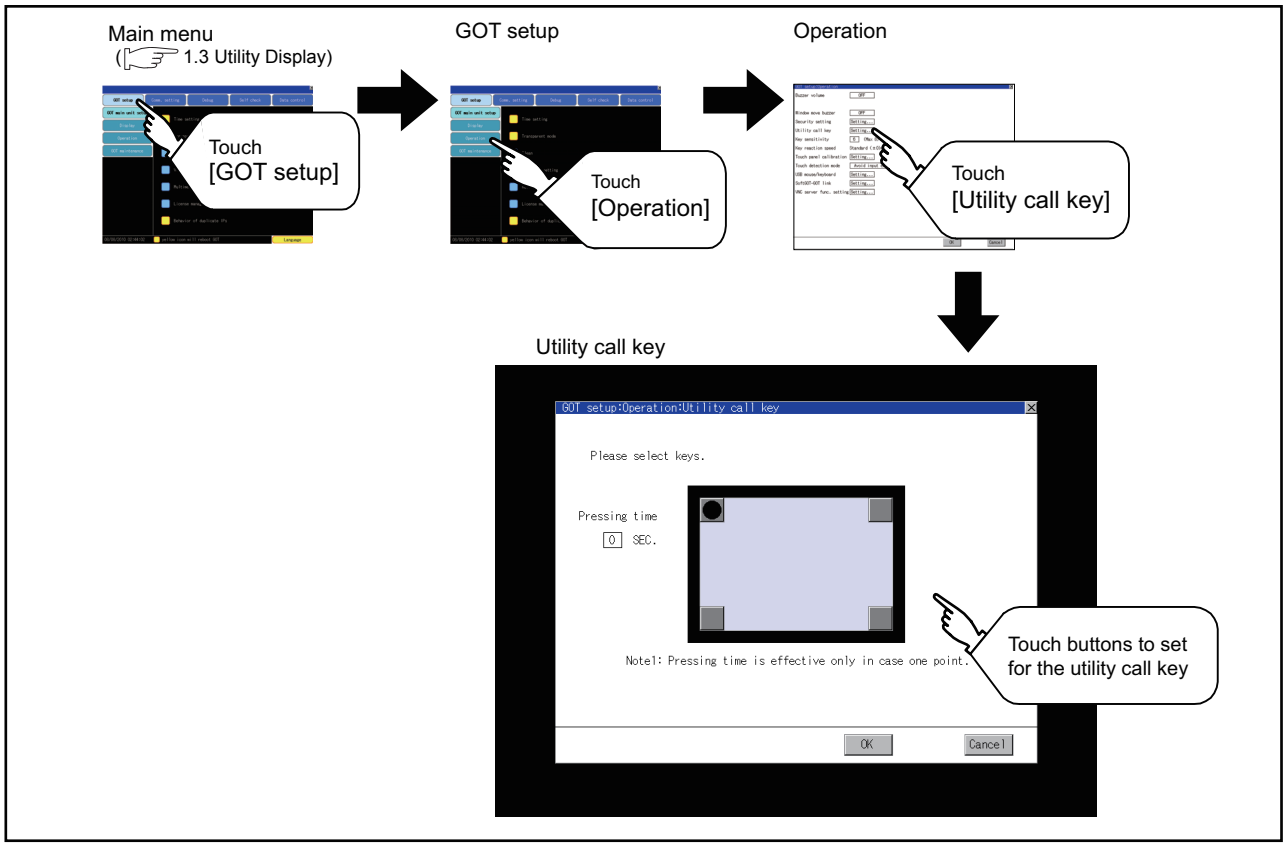
Operation settings by GT Designer3 or GT Designer2

Set the utility call key at [GOT set up] in [Environmental Setting] of GT Designer3 or in [System Environment] of GT Designer2.
When change a part of the setting after downloading the project data, change the setting by [Display] screen of the GOT.

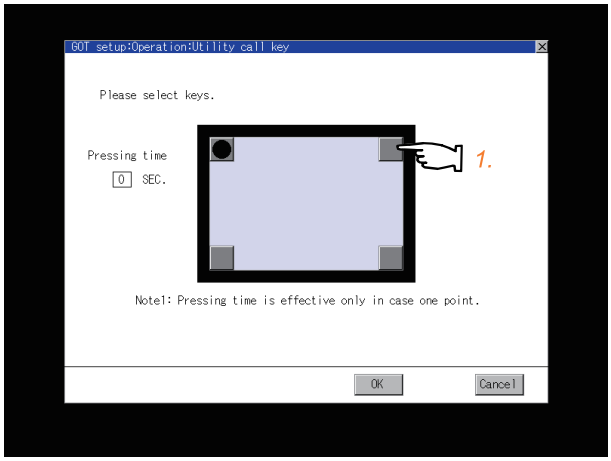
☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.9 GOT Display and Operation Setting)

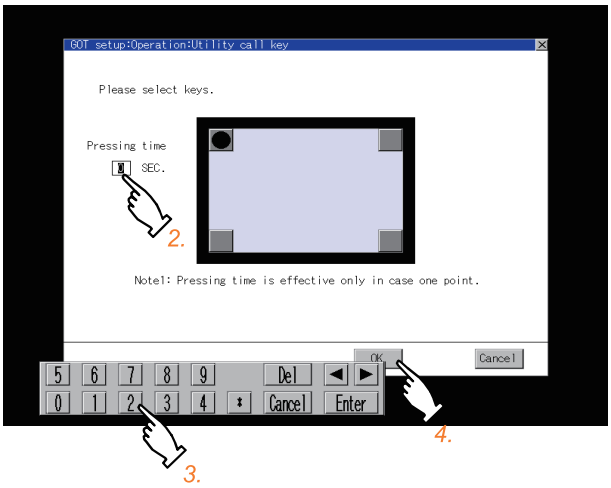
•GT Designer2 Version☐ Screen Design Manual
(3.8 Setting of the GOT display and operation (GOT setup))

■ Utility call key display operation



■ Utility call key setting operation





1. Touch ● or □ displayed at the 4 corners of the setting screen.
The button repeats ● ⇄ □ with every touch.
Set the corner to be specified as a key position to ● .
For the key position, up to 1 point can be specified.
When the key position is not specified, displaying the utility with the utility call key is not available.

2. When setting 1 point, specify the time to switch to the utility in case of keeping pressing the key position.
Touch the time input area.

3. Touching the input area displays a keyboard.
Input numerical value from the keyboard.

4. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Operation] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Operation] screen.

5. In the [Operation] screen, touching the [OK]/[Cancel]/☒ button restarts and operates the GOT with the changed settings.

POINT

(1) When the utility call key is not specified

The followings are the method for displaying the utility without using the utility call key.

(a) Changing the project data in GT Designer3

1. Read the project data in GT Designer3.
2. Set either of the followings in GT Designer3.
   - Set the utility call key in the [Display/Operation] tab of the [Environmental Setting] dialog box.
   - Set a special function switch to display the utility at the user-created screen.
3. Write the project data whose setting is changed to the GOT.

(b) Operating the forced start-up of the utility with the GOT

After powering on the GOT, pressing the S.MODE switch during [Booting] displayed on the upper left displays the utility in the screen.

When restricting the display of the utility, set a password in GT Designer3.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.7 Security Setting)

(2) Precautions on using the advanced alarm popup display

When [Display Position Switching] is set to [Switch] in the advanced alarm popup display setting, set either of the following for the utility call key.

- Setting the position of the utility call key to the upper-right or lower-left corner
- Setting [Pressing Time] of the utility call key to 1 or more seconds

When [Pressing Time] is set to 0 and the key position is set to the lower-left corner, the operation is as described below.

If the positions of the key and the advanced alarm popup display overlap, the utility screen appears by switching the display position of the advanced alarm popup display.

For the advanced alarm popup display, refer to the following.

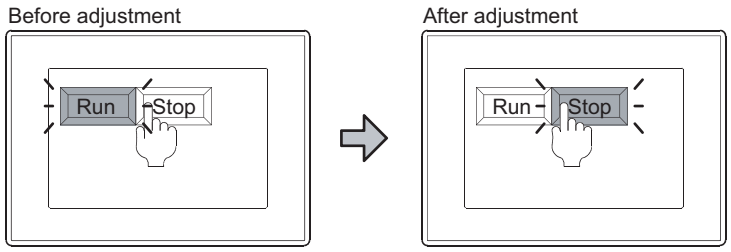
☞ •GT Designer3 Version1 Screen Design Manual (Functions)
(10.8 Advanced Alarm Popup Display)

•GT Designer2 Version □ Screen Design Manual
(8.5 Advanced Alarm Popup Display)

2.3.6 Adjusting the touch panel position (Touch panel calibration setting)

■ Touch panel calibration setting function

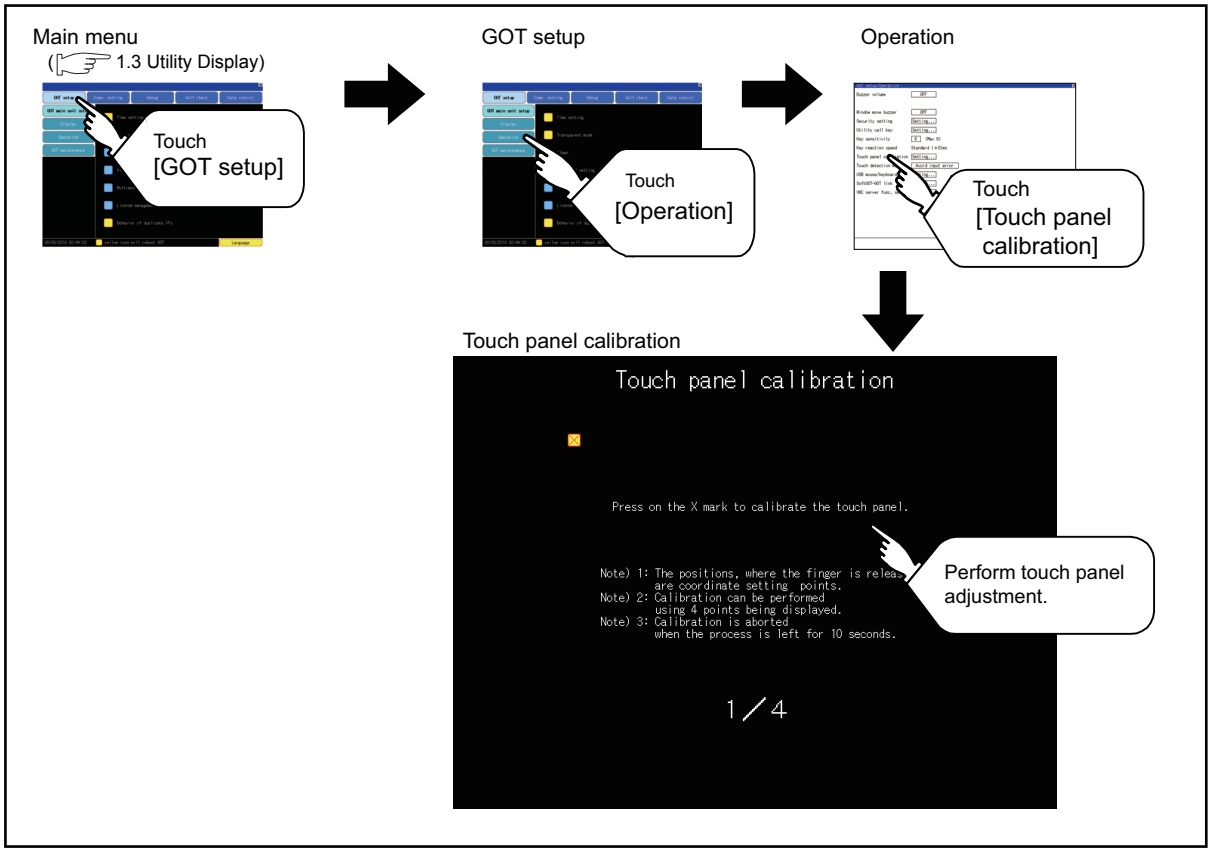
Touch panel reading error can be corrected.
Normally the adjustment is not required, however, the difference between a touched position and the object position may occur as the period of use elapses.
When any difference between a touched position and the object position occurs, correct the position with this function.



The [Run] will operate though you intended to touch the [Stop] button.

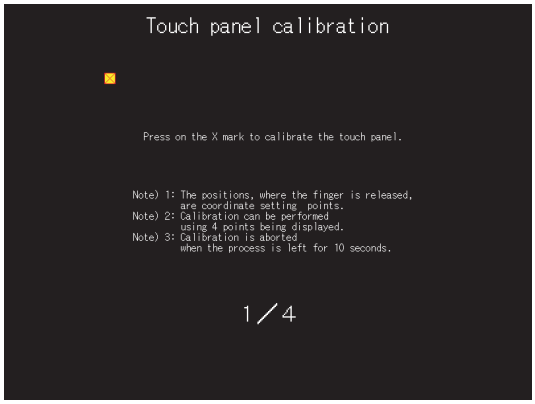
The [Stop] button can be touched without fail.

■ Touch panel calibration setting display operation

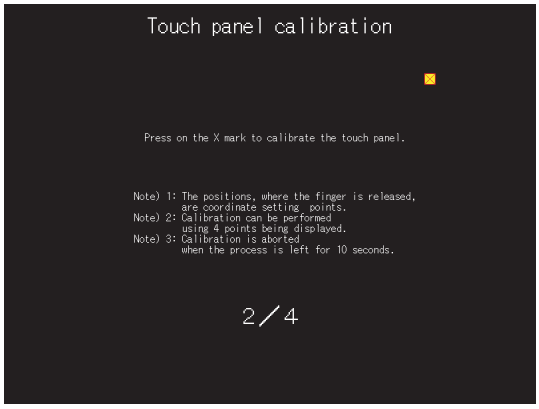


■ Touch panel calibration operation

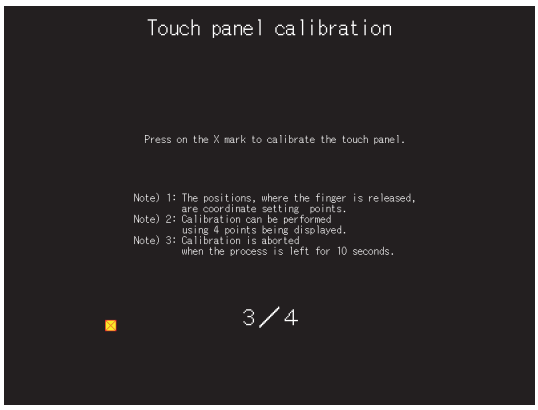
Touch the ☒ point displayed on the screen with the finger one by one to make the setting.



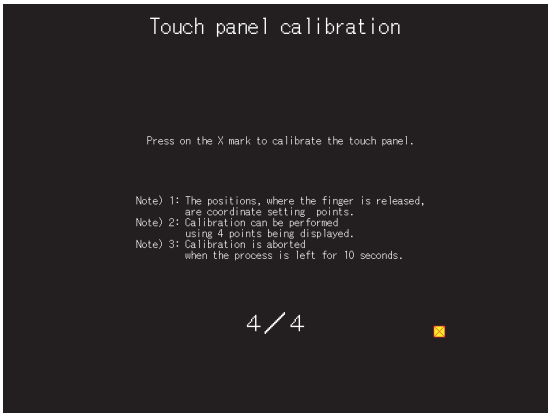
1. Touch the center of the ☒ displayed on the upper left precisely.



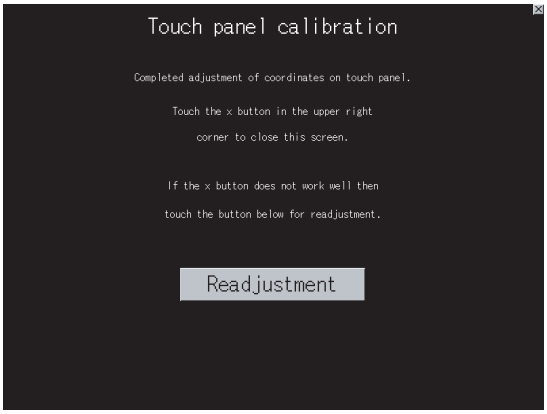
2. Touch the ☒ point displayed on the upper right.



3. Touch the ☒ point displayed on the lower left.



4. Touch the ☒ point displayed on the lower right.



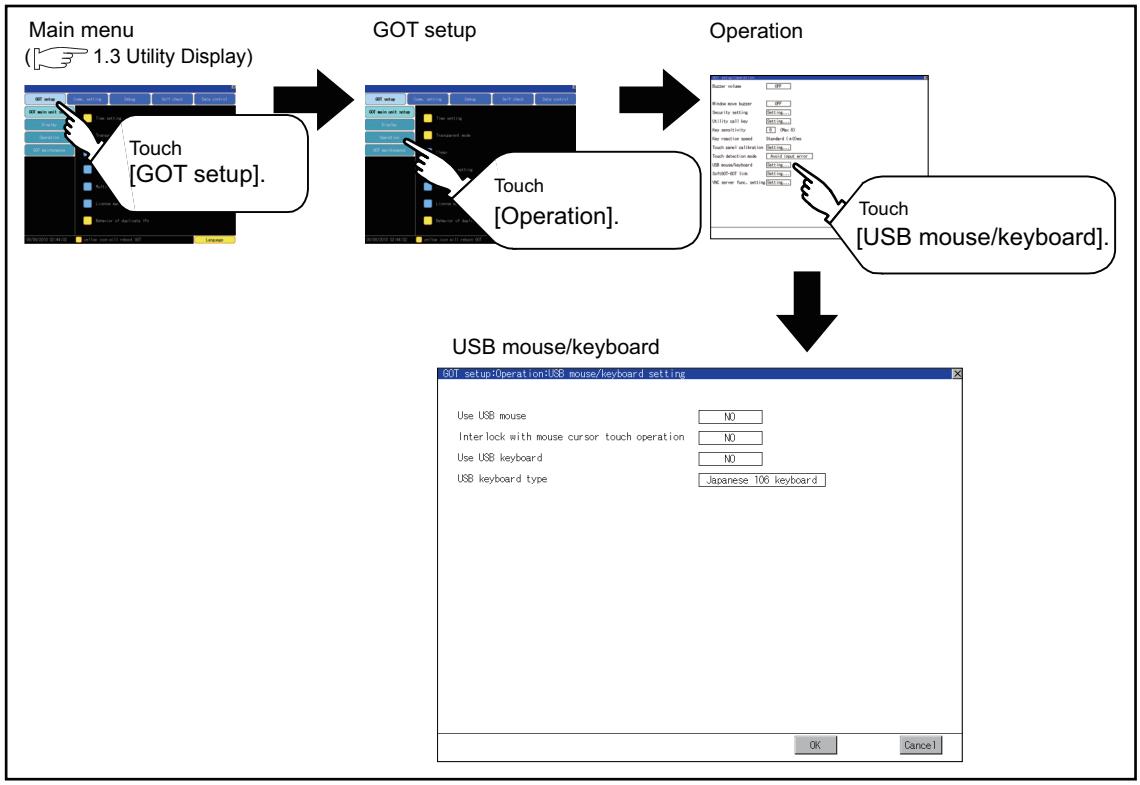
5. Touching the ☒ button displayed on the upper right returns to the previous screen.
When the precise touch could not be made, touch the [Readjustment] button to make the setting from step1 again.

2.3.7 USB mouse/keyboard setting

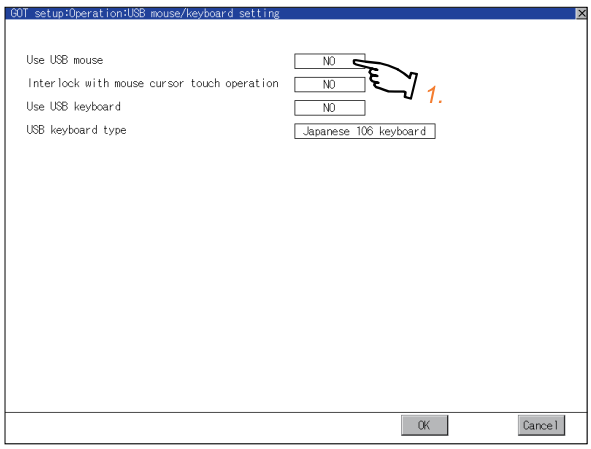
■ USB mouse/keyboard function

To install and use the USB mouse/keyboard on the GOT, set the USB mouse/keyboard.

■ USB mouse/keyboard setting display operation

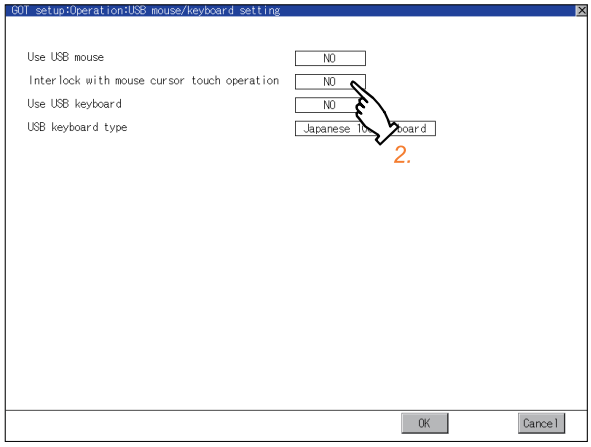


■ USB mouse/keyboard setting operation

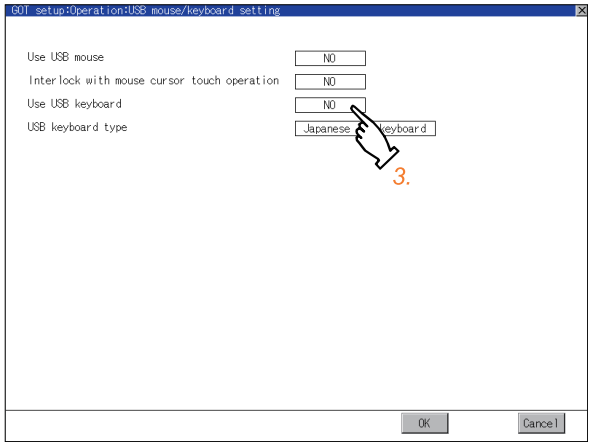


1. To use the USB mouse, touch the setting item of [Use USB mouse].
   The setting content is changed by touching.
   (YES ⇄ NO)

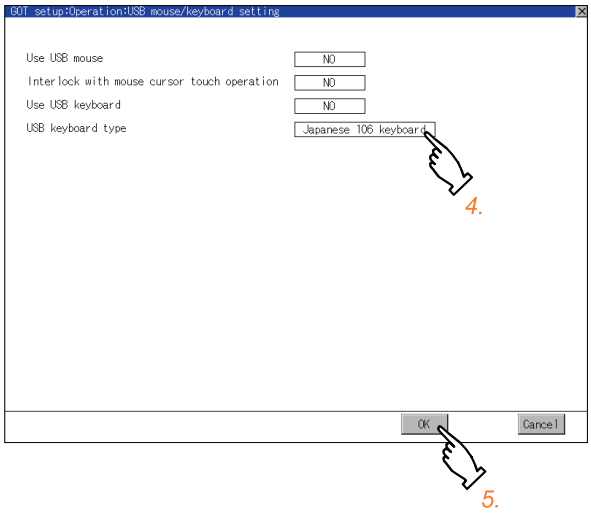
(Continued to next page)



2. To move the mouse cursor to the touched position, touch the setting item of [Interlock with mouse cursor touch operation].
The setting content is changed by touching.
(YES ⇄ NO)



3. To use the USB keyboard, touch the setting item of [USB keyboard type].
The setting content is changed by touching.
(YES ⇄ NO)



4. To use the USB keyboard, touch the setting item of [USB keyboard type].
The setting content is changed by touching.
(Japanese 106 keyboard ⇄ English 101 keyboard)

5. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Operation] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Operation] screen.

6. In the [Operation] screen, touching the [OK]/[Cancel]/☒ button restarts and operates the GOT with the changed settings.

2.3.8 SoftGOT-GOT link function setting

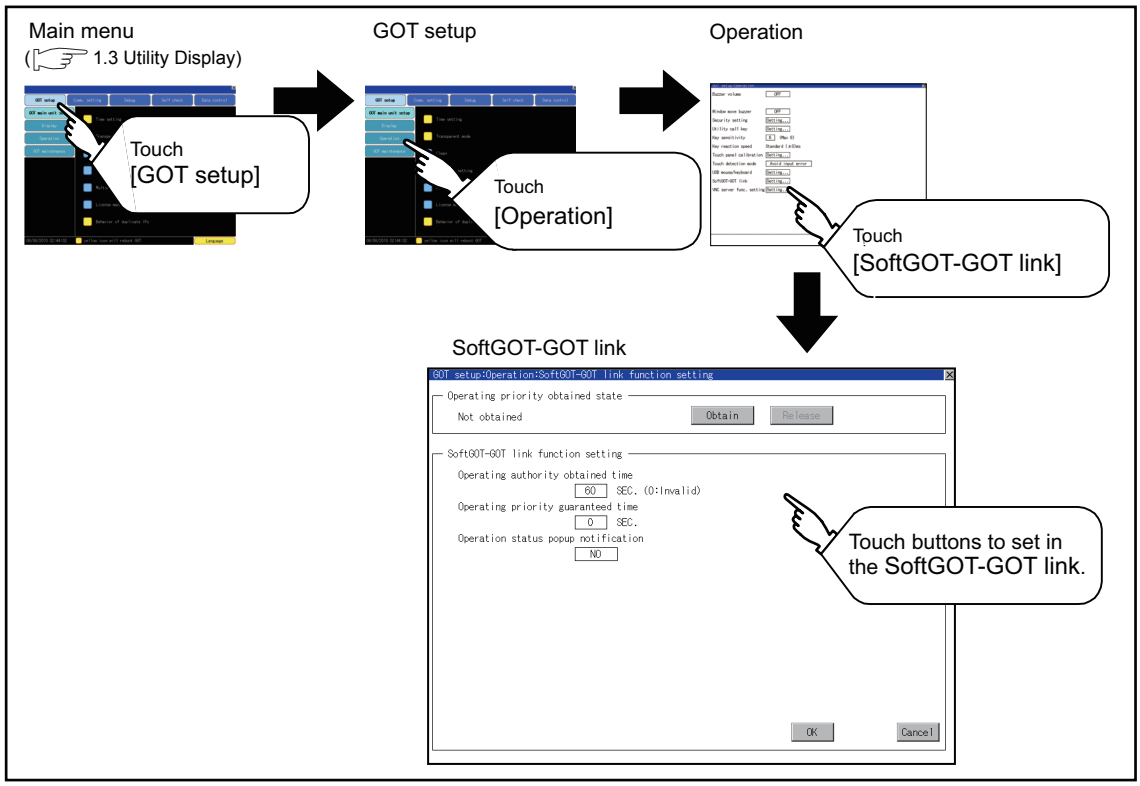
■ SoftGOT-GOT link function

The authorization of the SoftGOT-GOT link function can be set, and the exclusive authorization can be obtained or released.
Only the GOT can obtain the exclusive authorization. While the GOT has the exclusive authorization, GT SoftGOT1000 cannot obtain the authorization.
For the details of the SoftGOT-GOT link function, refer to the following.

GT SoftGOT1000 Version3 Operating Manual for GT Works3

Function	Description	Seting range	For GT Designer2	For GT Designer3
Exclusive authorization obtained state	The status whether or not the GOT obtains the exclusive authorization is displayed. Obtaining or releasing the exclusive authorization can be executed by the GOT.	Obtain/Release (At GOT startup: Release)	×	○
Authorization obtained time	The time length from the last operation of GT SoftGOT1000 after obtaining the authorization until the GOT automatically obtains the authorization can be set.	0 to 3600 seconds (At factory shipment: 60 seconds)	×	○
Operating priority guaranteed time	The time length for keeping the authorization obtained after the last operation of GT SoftGOT1000/GOT with the obtained authorization can be set. (The unauthorized equipment cannot obtain the authorization until the set time elapses.)	0 to 3600 seconds <At factory shipment: 0 seconds>	×	○
Operation status popup notification	When the authorization is not obtained in GT SoftGOT1000/GOT, whether to display or not the information of the authorized side in pop-up can be set.	YES/NO <At GOT startup: No>	×	○

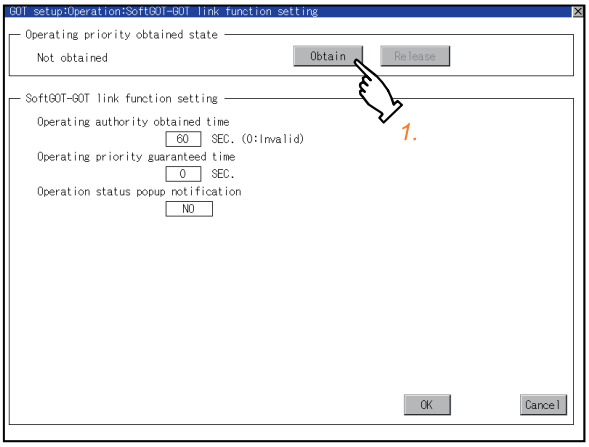
■ Displaying the SoftGOT-GOT link function setting



■ SoftGOT-GOT link function setting operation

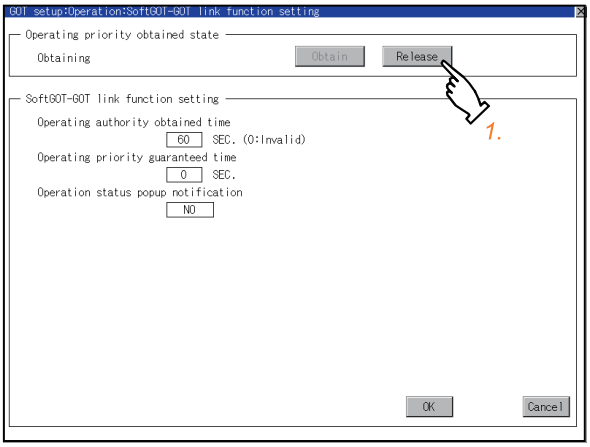
(1) Exclusive authorization obtained state

(a) Obtaining the exclusive authorization



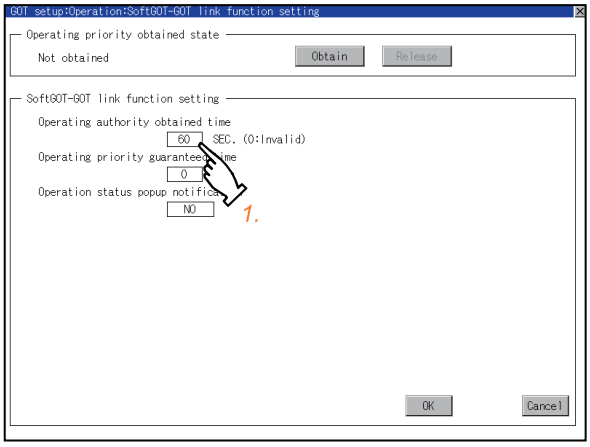
1. Touch the [Obtain] button to display the dialog box.
2. Touch the [OK] button to obtain the exclusive authorization.
   Touch the [Cancel] button to stop obtaining the exclusive authorization.

(b) Releasing the exclusive authorization



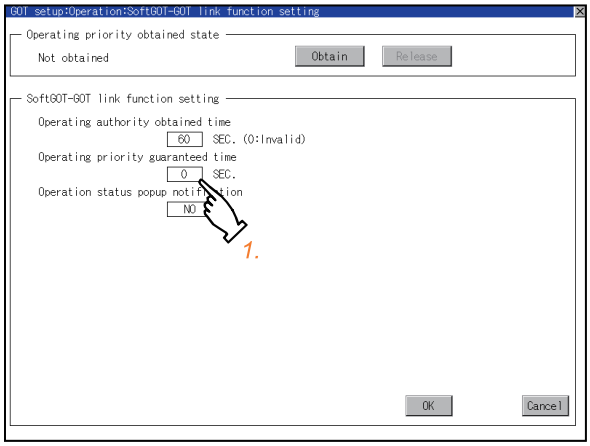
1. Touch the [Release] button to display the dialog box.
2. Touch the [OK] button to release the exclusive authorization.
   Touch the [Cancel] button to stop releasing the exclusive authorization.

(2) Authorization obtained time



1. If touch the select button of the authorization obtained time, a keyboard is displayed.
   Enter the authorization obtained time with the keyboard.
   When setting to 0 second, the authorization is not automatically obtained by the GOT.
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Operation] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Operation] screen.
3. In the [Operation] screen, touching the [OK]/[Cancel]/☒ button restarts and operates the GOT with the changed settings.

(3) Operating priority guaranteed time



1. If touch the select button of the operating priority guaranteed time, a keyboard is displayed. Enter the operating priority guaranteed time with the keyboard.
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Operation] screen. If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Operation] screen.
3. In the [Operation] screen, touching the [OK]/[Cancel]/☒ button restarts and operates the GOT with the changed settings.

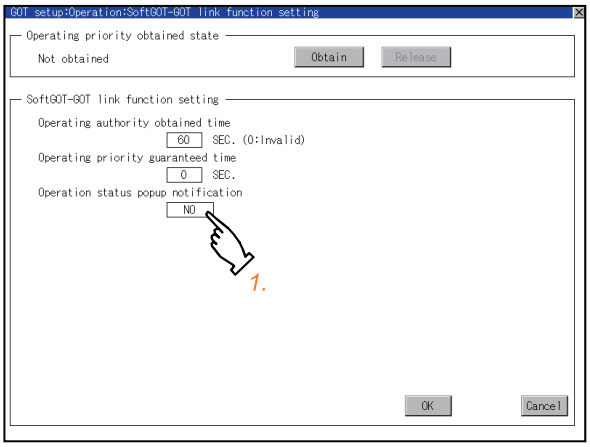
POINT

Relation between the authorization obtained time and the operating priority guaranteed time

When the followings are set, the authorization obtained time is prioritized. (After the authorization obtained time is elapsed, the GOT automatically obtains the authorization.)

- 1sec or more is set for the authorization obtained time.
- The authorization guarantee time is set longer than the authorization obtained time.

(4) Operation status popup notification



1. If the setting item is touched, the Language screen is displayed. (YES ⇄ NO)
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Operation] screen. If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Operation] screen.
3. In the [Operation] screen, touching the [OK]/[Cancel]/☒ button restarts and operates the GOT with the changed settings.

2.3.9 VNC(R) server function setting

■ VNC® server function setting

In the VNC® server function setting, the authorization guarantee time for the VNC® server function can be set.
For the details of the VNC® server function, refer to the following.

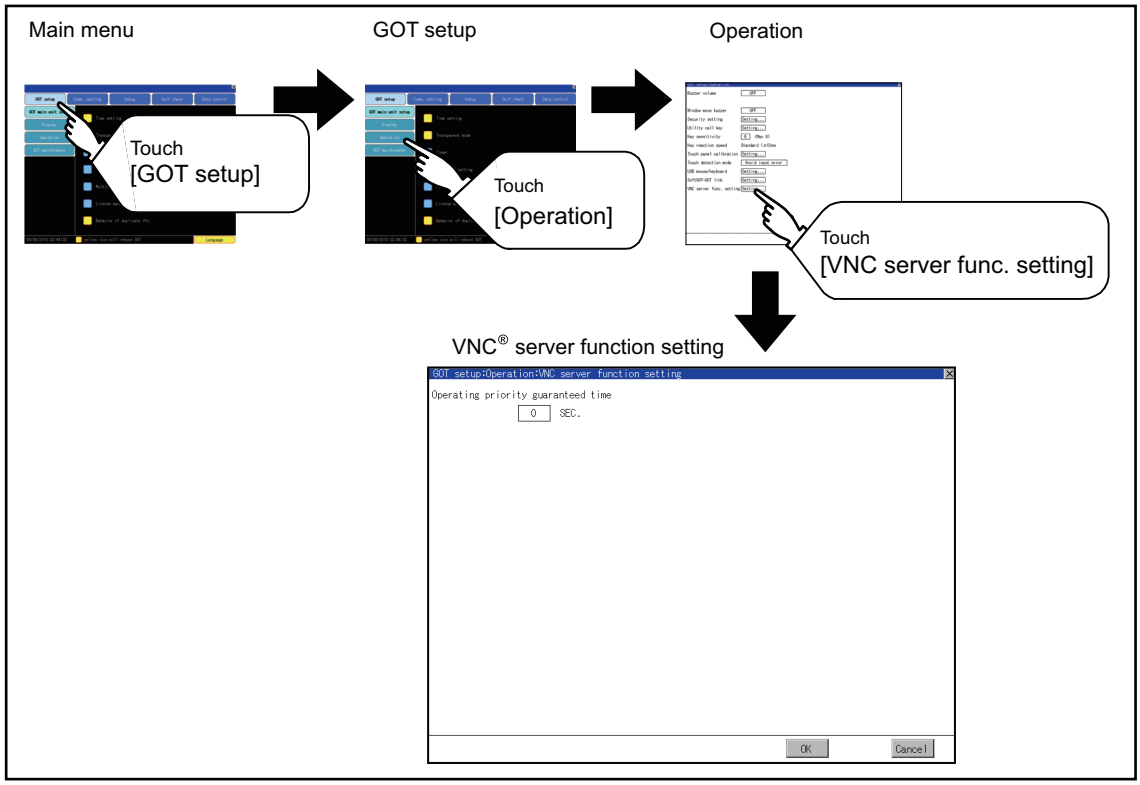
GT Designer3 Version1 Screen Design Manual (Functions)

Function	Description	Setting range	For GT Designer2	For GT Designer3
Operating priority guaranteed time	The time that the authorized equipment holds the authorization after you operate the authorized equipment can be set. (The unauthorized equipment cannot obtain the authorization until the set time elapses.)	0 to 3600 seconds <At factory shipment: 0 seconds>	×	○

POINT

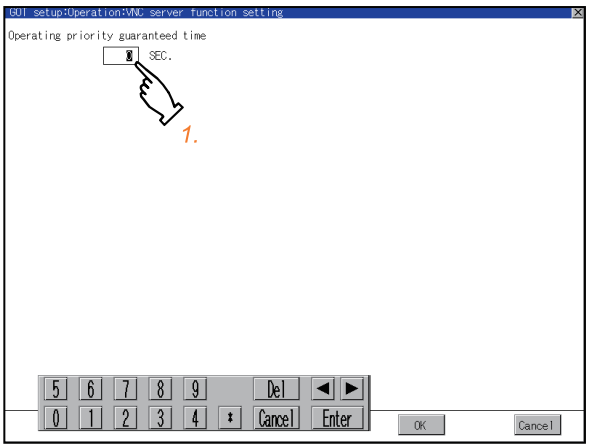
Authorization guarantee time cancel signal (GS1792.b8)
When the Authorization guarantee time cancel signal (GS1792.b8) turns on, the authorization guarantee time setting is disabled.

■ Displaying the VNC® server function setting



■ VNC® server function setting operation

(1) Operating priority guaranteed time



1. Touch the input field for [Operating priority guaranteed time] to display a keyboard.
   Input the authorization guarantee time with the keyboard.
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Operation] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Operation] screen.
3. In the [Operation] screen, touching the [OK]/[Cancel]/☒button restarts and operates the GOT with the changed settings.

2.4 Maintenance Function

2.4.1 Maintenance time setting

Energization time, touch count and writing times used as a standard for the maintenance time are set.
For using the maintenance time notification, a battery is required.
Refer to the following for the details of battery.

☞ (Hardware) 8. OPTION

Item	Description	Setting range	Unit	For GT Designer2	For GT Designer3	Maintenance points Reference
Backlight maintenance time notification period. (0 to 100000 hour)	Sets energization time for the maintenance notification output. When 0, no message notification. The time is counted only when backlight is lit, in every ten minutes.	0 to 100 <At factory shipment: 0>	1000 hours	○	○	(Hardware) 9.5 Backlight Shutoff Detection and Replacement
Display section maintenance time notification period (0 to 100000 hour)	Sets energization time for the maintenance notification output. When 0, no message notification. The time is counted only when energized, in every ten minutes.	0 to 100 <At factory shipment: 0>	1000 hours	○	○	—
Touch key maintenance time notification count (0 to 2000000times)	Sets touch key touching count for the maintenance notification output. When 0, no message notification. Counts by every screen touch.	0 to 200 <At factory shipment: 0>	10000 times	○	○	—
Built-in flash memory maintenance time notification count (0 to 200000times)	Sets built-in flash memory writing count for the maintenance notification output. When 0, no message notification. Counts by every writing in built-in flash memory.	0 to 200 <At factory shipment: 0>	1000 times	○	○	—

■ Function of the maintenance timing setting

For using the maintenance time notification, a battery is required.
When setting the time or count to notify the maintenance time, refer to the life described in “(Hardware) Section 3.2“ as a guide.
The maintenance time notification is output by the following two methods.
•Outputs to GOT special register (GS680).
•Outputs as system alarm
For details of the GOT special register and system alarm, refer to the following.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
•GT Designer3 Version1 Screen Design Manual (Functions)
•GT Designer2 Version ☐ Screen Design Manual

POINT

Switching OFF the maintenance time notification output

The maintenance time notification setting which has been set once is not switched OFF even if changing its setting. Switch OFF the maintenance time notification by the following methods.

- Execute addition time reset.
- Switch OFF each bit of "maintenance time notification cancel information (GS638)".

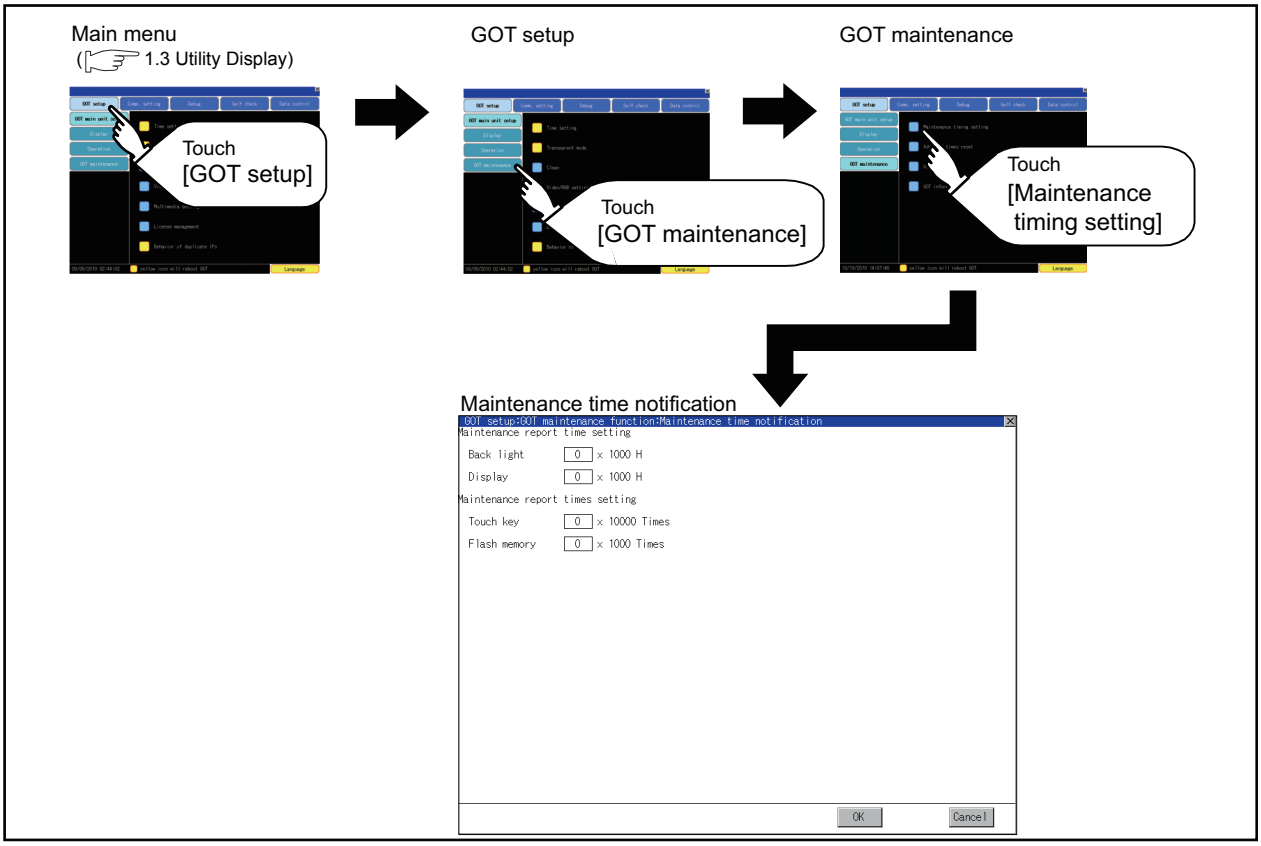
By using system alarm, the message that notifies that the maintenance time is near or it is already maintenance time is displayed.
For the display of the system alarm, refer to the following.

(Hardware) 10. TROUBLESHOOTING

For the display of the system alarm, refer to the following.

•GT Designer3 Version1 Screen Design Manual (Functions)
•GT Designer2 Version ☐ Screen Design Manual

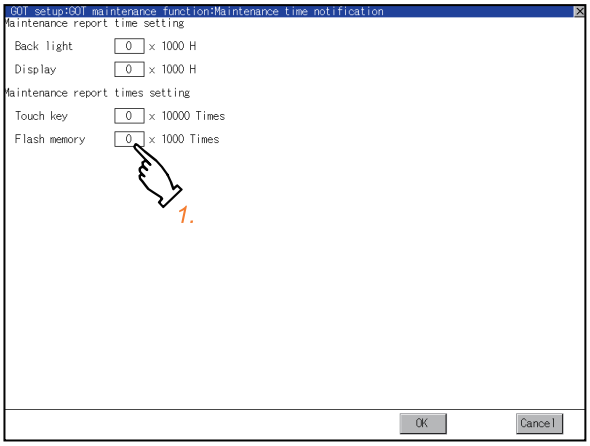
■ Display operation of maintenance timing setting



For the addition times as power on addition time, refer to the following.

2.4.2 Addition times reset

■ Operating the maintenance timing setting



1. Touch the select button of each setting item to display the keyboard.
   Enter the value to be set.
   For the keyboard operation, refer to the following.
   1.3.3 ■Keyboard operation
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [GOT maintenance] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [GOT maintenance] screen.

2.4.2 Addition times reset

Displays the present value of Backlight maintenance time notification period, Display section maintenance time notification period, Touch key maintenance time notification count and Built-in flash memory maintenance time notification count which are additioned for the maintenance time notification, respectively and resets these values.
For maintenance time notification setting, refer to the following.

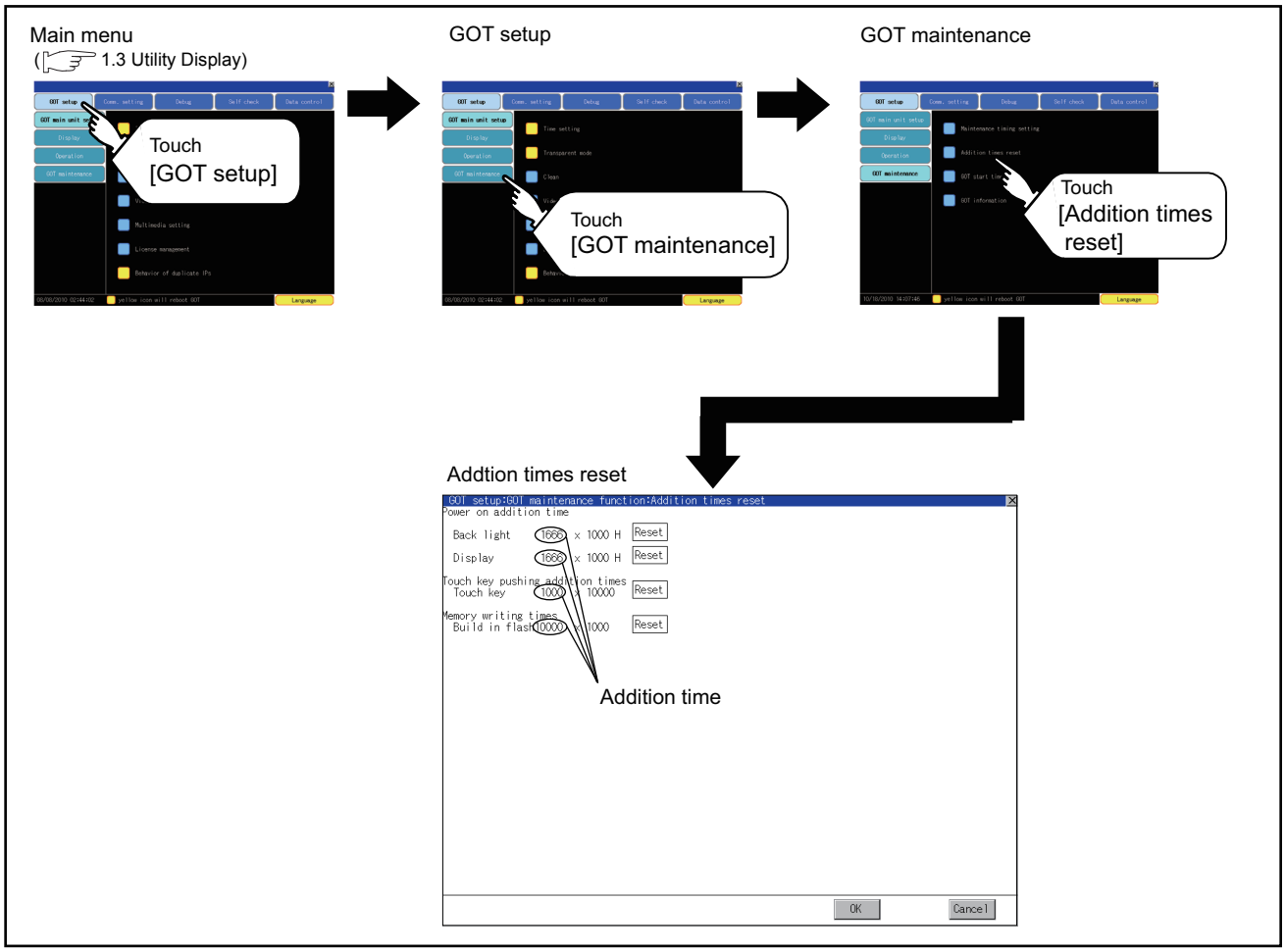
2.4.1 Maintenance time setting

■ Addition times reset function

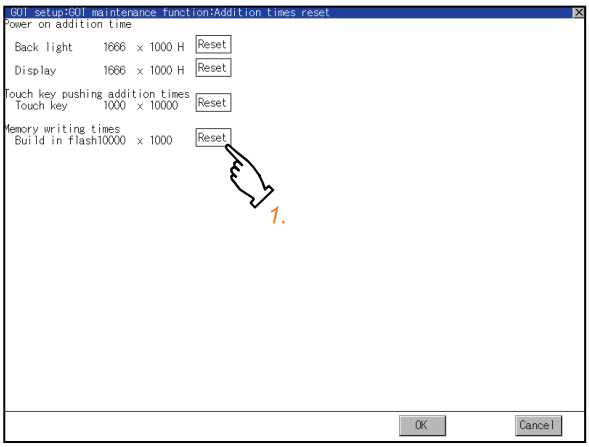
Resets the value which is additioned by the "2.4.1 ■Maintenance time setting" to "0".

Item	Description	For GT Designer2	For GT Designer3
Backlight power on addition time reset	Function to reset the power on addition times to "0".	○	○
Display power on addition time reset	Function to reset the power on addition times to "0".	○	○
Touch key pushing addition times reset	Function to reset the pushing addition times to "0".	○	○
Build in flash memory writing addition times reset	Function to reset the writing addition times to "0".	○	○

■ Display operation of Addition times reset



■ Operation of Addition times reset



1. Touch the [Reset] button of each item to set "0" for the addition time and addition count.
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [GOT maintenance] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [GOT maintenance] screen.

POINT

Addition times resetting timing

It is convenient to reset addition times when replace backlight, display section, touch panel or built-in flash memory.

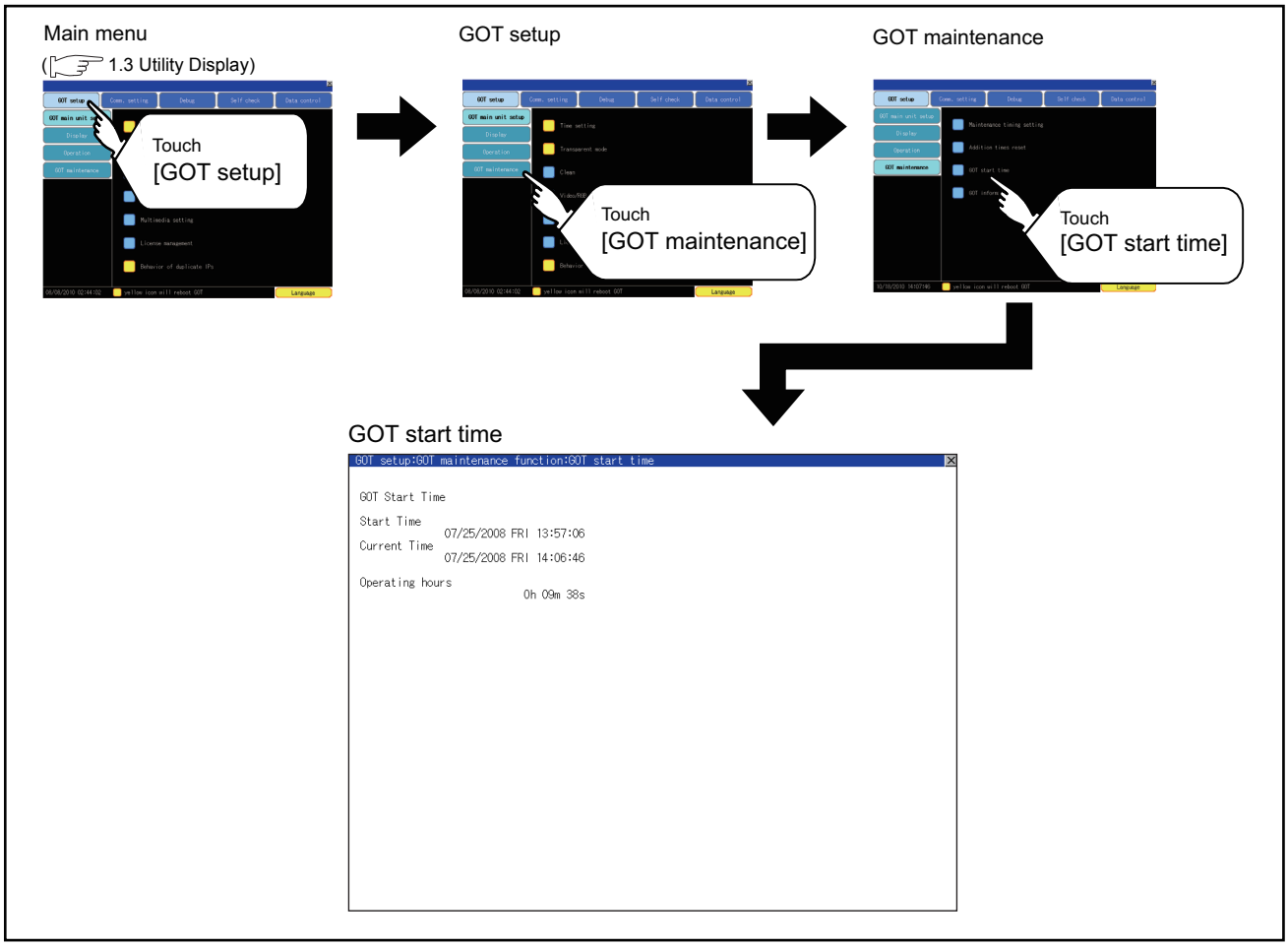
2.4.3 GOT start time

■ GOT start time function

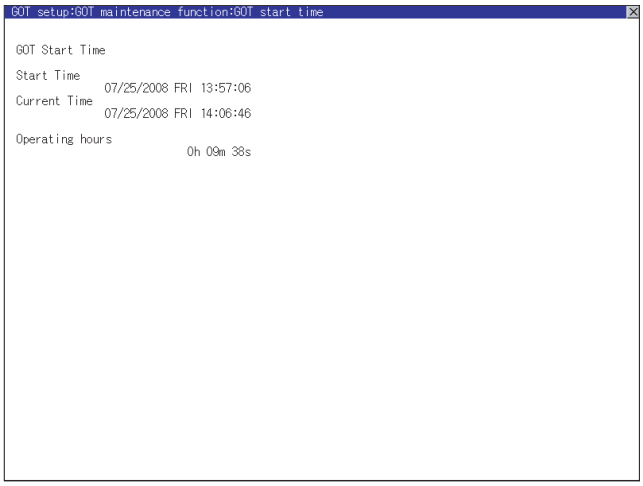
GOT start time is the function to display the following date and time.

- Start time of GOT
- Current time of GOT
- Operating hours of GOT

■ Display operation of GOT start time



■ Display of GOT start time



Item	Description
Start Time	Displays the time when the GOT was powered on or reset-restarted (OS installation, communication setting change).
Current Time	Displays the current time.
Operating hours	Displays operating hours of the GOT. The displayed operating hours is the accumulated time while GOT is powered on or reset-restarted (OS installation, communication setting change). When powering off or reset-restarting the GOT, the operating hours is cleared.

POINT

To display correct time

Set the clock of GOT. (☞ 2.1.1 Time setting)

When the clock has not been set, the correct time is not displayed at [Start Time] and [Current Time].

HINT

Time displayed at [Operating hours]

[Operating hours] is displayed irrespective of [Start Time] and [Current Time].

When changing the clock of the GOT, [Operating hours] does not match with the difference between [Current Time] and [Start Time]. ([Operating hours] is not the time calculated from [Current Time] and [Start Time].)

The time displayed at [Operating hours] is a reference for the accumulated time while GOT is powered on or reset-restarted (OS installation, communication setting change).

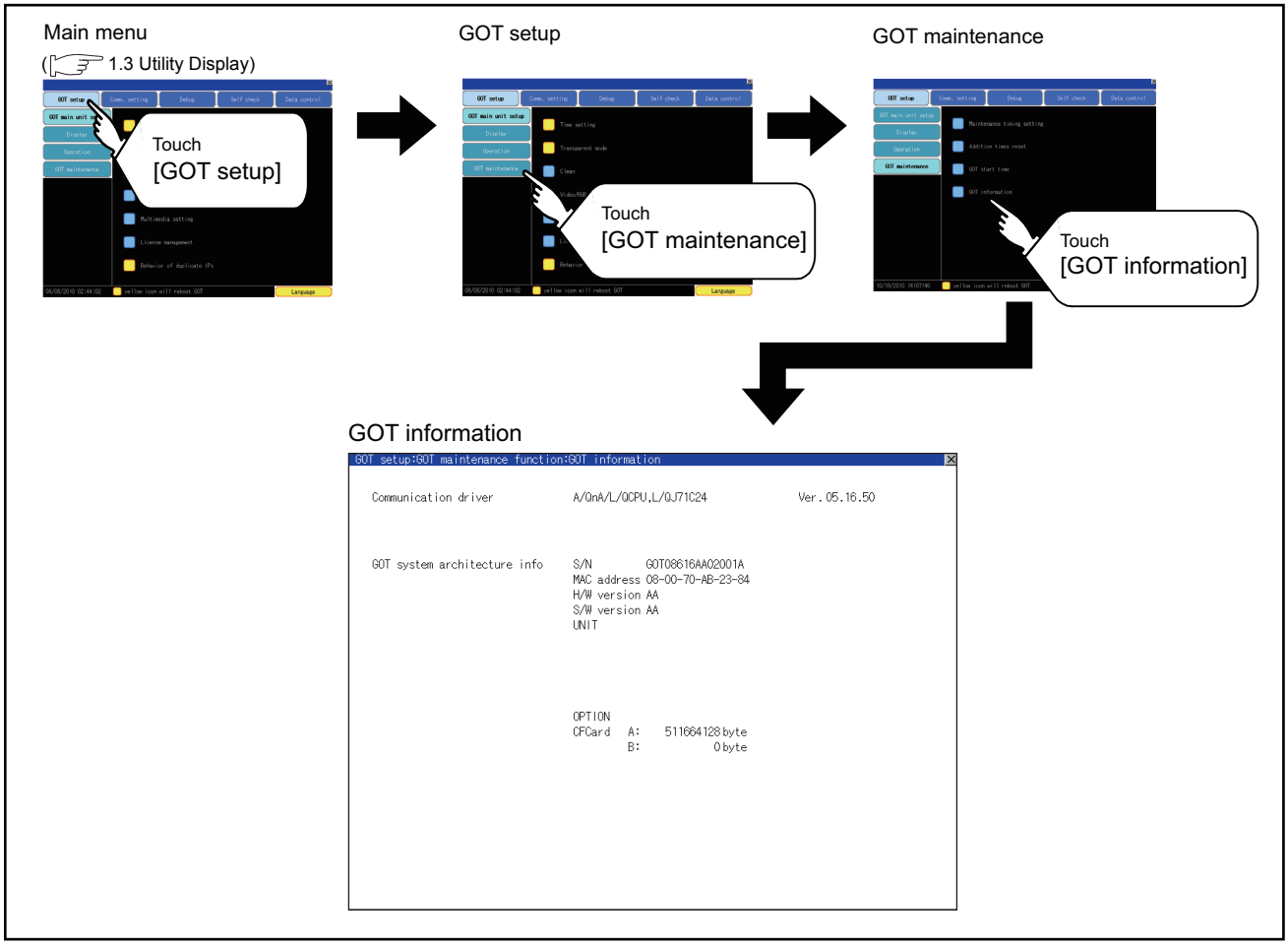
2.4.4 GOT information

■ GOT information function

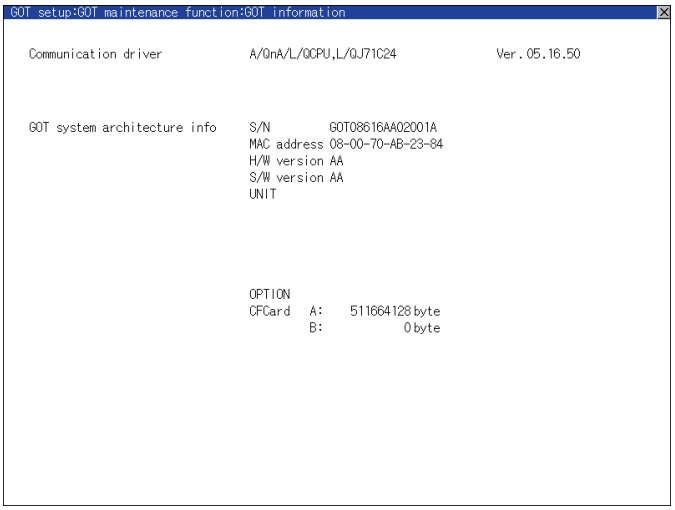
GOT information is the function to display the following GOT information.

- Communication driver written in the GOT
- Serial number
- MAC address
- H/W version
- S/W version at factory shipment
- Communication unit mounted on the GOT
- Option unit mounted on the GOT
- Capacity of the CF card mounted on A drive/B drive

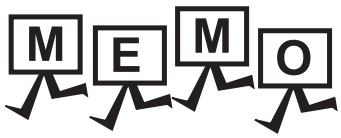
■ Display operation of GOT information



■ Display of GOT information



Item	Description
Communication driver	Displays the communication driver written to the GOT.
S/N	Displays the serial number.
MAC address	Displays the MAC address.
H/W version	Displays the H/W version.
S/W version	Displays the S/W version at factory shipment.
UNIT	Displays the communication unit mounted on the GOT.
OPTION	Displays the option unit mounted on the GOT.
CFCard	Displays the capacity of the CF card mounted on A drive/B drive.


MEMO

3. COMMUNICATION INTERFACE SETTING (COMMUNICATION SETTING)

In the communication setting, the communication interface names and the related communication channel, communication driver names display and channel numbers are set.
Moreover, in the communication detail setting, the communication interface details are set. (Communication parameters setting)

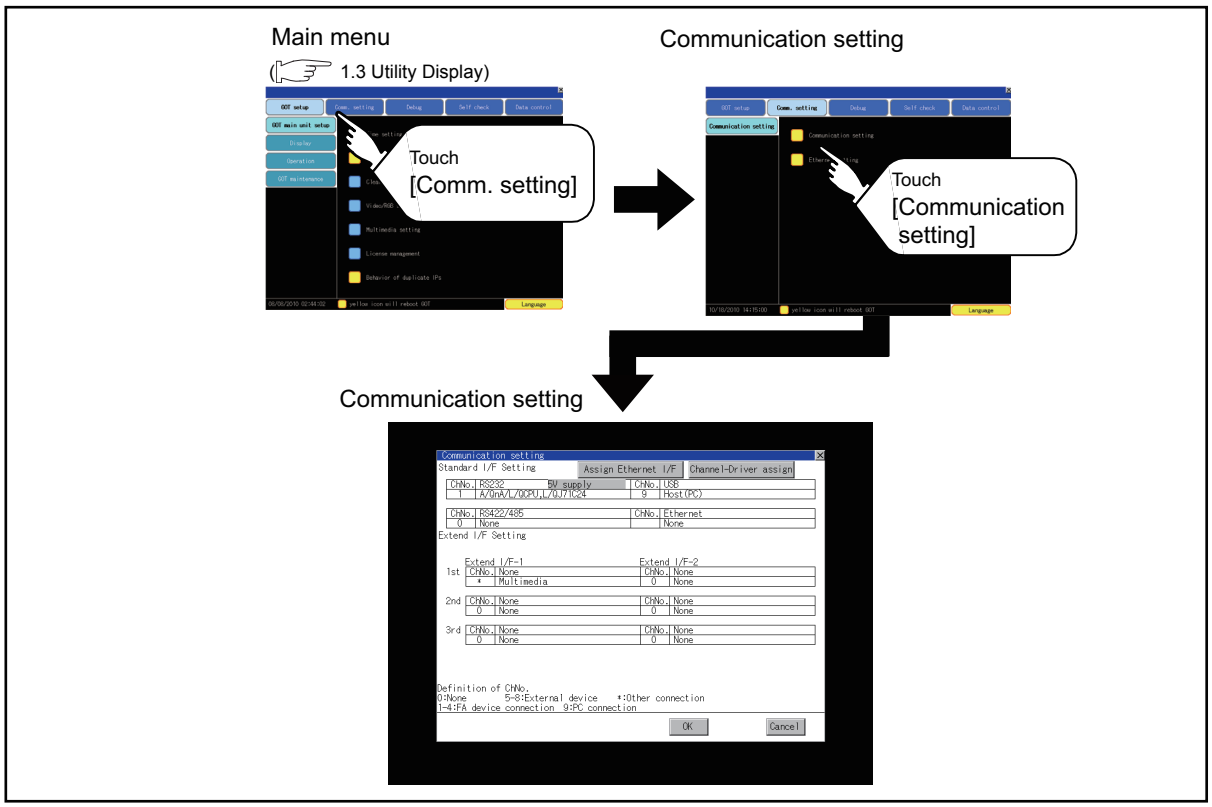
Function	Description	For GT Designer2	For GT Designer3	Reference
Communication setting	The setting contents of the communication interface can be checked or changed.	○	○	3.1
Ethernet setting	The contents of the Ethernet setting can be checked and the host can be changed.	×	○	3.3

3.1 Communication Setting

3.1.1 Communication setting functions

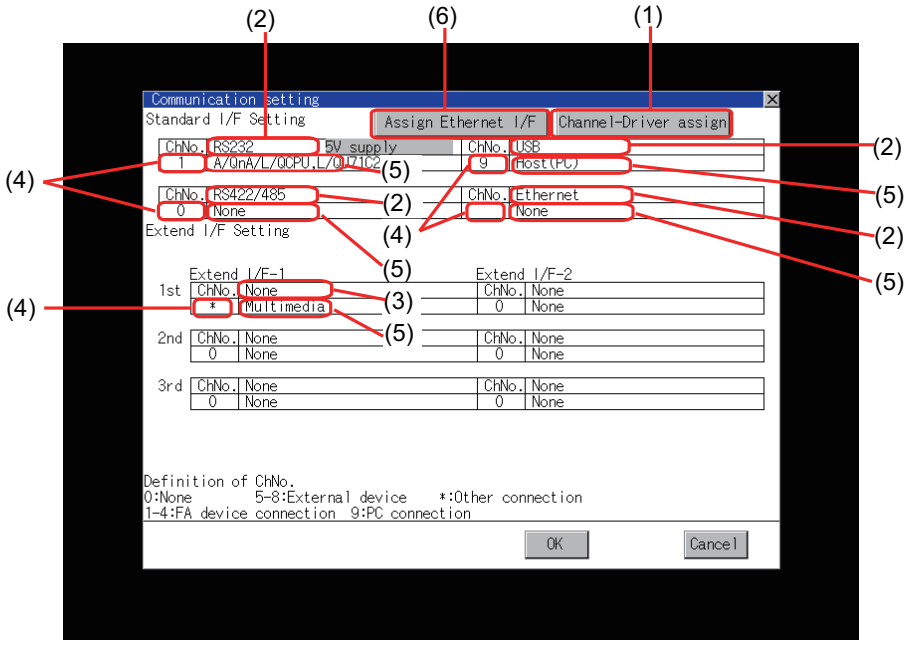
Function	Description	For GT Designer2	For GT Designer3
Channel-Driver assign	Change the assignment of channel No. and communication driver name.	○	○
Assign Ethernet I/F	Change the assignment of channel No. and communication driver name of the device connected using the Ethernet interface.	○	○
Channel no. (Ch No.) setting	Set the channel numbers of the communication interface (Standard interface/ Extend interface).	○	○
Communication parameters setting	Set communication parameters of communication devices.	○	○

3.1.2 Communication setting display operation



3.1.3 Communication setting contents

This section describes setting items and display contents for Communication Setting.



(1) Channel-Driver assign

(a) Assignment of communication drivers to channels
Communication drivers installed in the GOT can be assigned to channels.
Even without setting [Controller Setting] on GT Designer3 or [Communication Setting] on GT Designer2, communication with controller is available by assigning channel No. with this function.

3.1.4 ■Channel-Driver assign operation

(b) Changing the assignment of communication drivers to channels
Without using GT Designer3 or GT Designer2, the assignment of communication drivers to channels can be changed. (When change a communication driver, the alternative communication driver has to be installed in GOT in advance.)

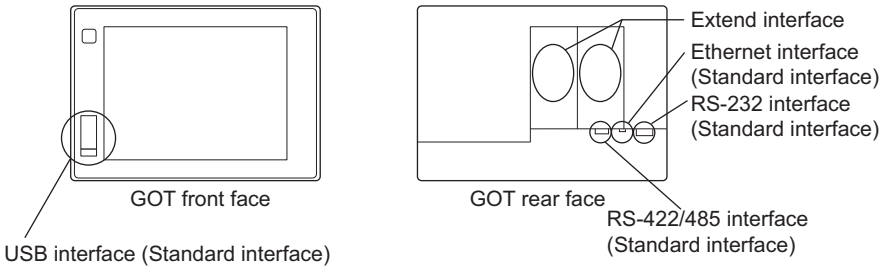
(2) Standard interface display BOX

Display the communication interface included as standard in GT16☐☐.
There are the following 4 types.
RS232.....For communicating with PC (GT Designer3 or GT Designer2), controller
RS-422/485.....For communicating with controller
USB.....For communicating with PC (GT Designer3 or GT Designer2)
Ethernet.....For communicating with PC (GT Designer3 or GT Designer2), controller

(3) Extend interface display BOX

The name of the unit installed in the extend interface is displayed.
(Displays [None] when any unit is not mounted.)
For details of each uint, refer to the following.

(Hardware) 8.1 Communication Unit



(4) Channel number specification menu BOX

Set channel No. to use with standard interface or extend interface.
Refer to this section (5) for driver that can be assigned to each channel.

0	: Set when the communication interface is not used.
1 to 4	: Set when connecting to a controller. (Except fingerprint unit, bar code reader, RFID controller and PC)
5 to 7*1*2	: Set when connecting to a barcode reader, an RFID controller or a PC. Only extend I/F setting is possible.
8*1*2	: Set when connecting to a fingerprint unit, a barcode reader, an RFID controller or a PC. Only standard I/F setting is possible.
9*1	: Set when connecting with PC (GT Designer3 or GT Designer2). (For USB and RS-232 interface, the simultaneous setting is possible. However, when either interface is during communication, communication is not possible for another interface.)
*	: Set when using the function that uses the gateway function (when connection types except the Ethernet connection is used for connecting to controllers), MES interface function, Ethernet download function, report function, hard copy (when printing), video display, RGB display, RGB output, external I/O, operation panel function, sound output, Multimedia, CF card unit or CF card extension unit.

- Fixed to 9 for the USB interface.

*1 Cannot be assigned with Ethernet I/F Assignment.

*2 The same device cannot be used for ChNo.5 to Ch No.8 simultaneously.
For restrictions on external devices, refer to the following manual.

☞ •GOT1000 Series Connection Manual for GT Works3 and a controller used
(1.1 Setting the Communication Interface)

•GT Designer2 Version□ Screen Design Manual
(3.7 Communication Interface Setting (Communication Settings))

(5) Driver display BOX

The name of communication driver assigned to the channels or the driver set with the Communication Setting of GT Designer3 or GT Designer2 is displayed.
For details of drivers to be displayed, refer to the following manual.

☞ •GOT1000 Series Connection Manual for GT Works3 and a controller used
(1.1 Setting the Communication Interface)

•GT Designer2 Version □ Screen Design Manual
(3.7 Communication Interface Setting (Communication Settings))

Display [None] in the driver display BOX in case of the followings.

- The communication driver is not installed. (☞ 6.3.1 OS information)
- In channel number specification menu BOX, [0] is set.
- The communication unit type and the communication driver are mutually not corresponding at the extend interface side.

When the channel number for the standard I/F-1 is set to [9], the communication driver [Host (PC)] or [Host (Modem)] can be selected.
When the channel number for the standard I/F-2 is set to [9], the communication driver [Host (PC)] is automatically assigned.
For how to set the communication driver, refer to the following.

☞ 3.1.4 ■Host (PC)/Host (Modem) settings

(6) Assign Ethernet I/F

The communication settings for the Ethernet connection can be made.
Ethernet I/F Assignment can assign up to four channels per interface.

☞ 3.1.4 ■Assign Ethernet I/F operation

POINT

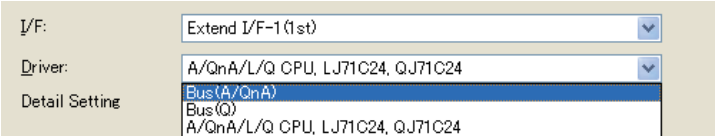
Precautions for communications between GOT and controller

(1) Installing communication driver and downloading Communication Setting

The followings below are required for the communication interface to communicate with the controller.

1) Installing communication drivers (Up to 4 communication drivers)
2) Assigning the channel number and communication driver for the communication interface
3) Downloading the contents (project data) assigned in 2).

Perform1), 2), 3) by GT Designer3 or GT designer2.

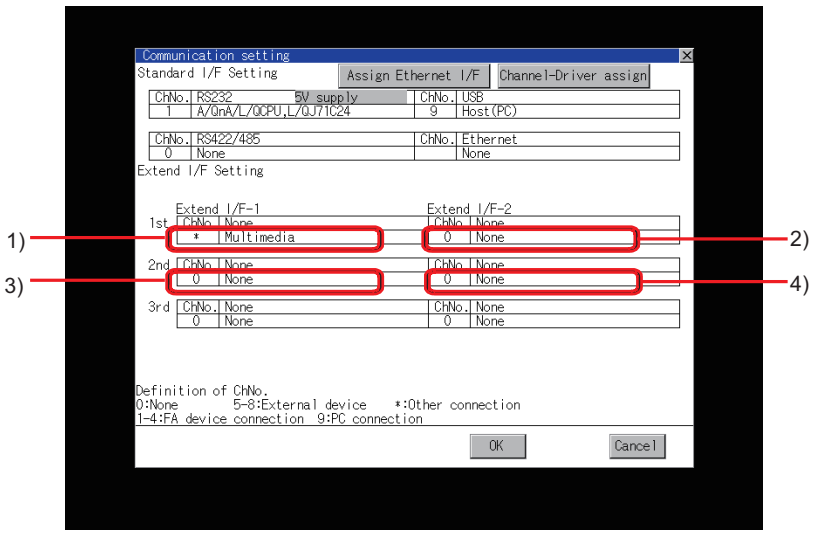


Refer to the following for details.

- GOT1000 Series Connection Manual for GT Works3 and a controller used (1.1 Setting the Communication Interface)
- GT Designer2 Version □ Screen Design Manual (3.7 Communication Interface Setting (Communication Settings))
- GT Designer3 Version1 Screen Design Manual (Fundamentals) (7.3.7 Reading project data)
- GT Designer2 Version □ Basic Operation/Data Transfer Manual (8.3.1 Downloading project data [PC to GOT])

(2) When Communication Setting has not been downloaded.

The GOT automatically assigns the installed communication driver in the order of 1 to 4 as follows. (Only the extend interface is assigned automatically.)



1) ChNo.1, Communication driver installed at 1st
2) ChNo.2, Communication driver installed at 2nd
3) ChNo.3, Communication driver installed at 3rd
4) ChNo.4, Communication driver installed at 4th

(a) After communication driver is assigned automatically.
When saving the settings to the GOT with [OK] button after the automatic assignment of communication driver, automatic assignment will not be performed at the next time and after.

(b) Priority against [Controller Setting] of GT Designer3 or [Communication Settings] of GT Designer2
If download the communication settings to the GOT with GT Designer3 or GT Designer2 after the automatic assignment, the GOT will operate with the communication settings of the GT Designer3 or GT Designer2. (The GOT operates with the latest communication settings.)

(3) When the communication driver does not match with the unit that is installed in the GOT

An error is displayed on the GOT when displaying [Communication setting].
If an error is displayed, confirm the combination of the communication driver and communication unit.
Refer to the following manual for the combination.

•GOT1000 Series Connection Manual for GT Works3 and a controller used (System Configuration in each chapter)
•GOT1000 Series Connection Manual for GT Designer2/GT Works2 (System Configuration in each chapter)

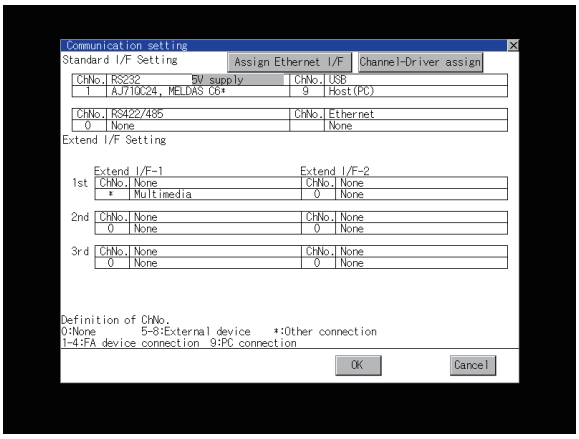
■ Channel-Driver assign operation

The following describes how to operate the Channel-Driver assign.
The example of changing to the direct CPU connection (Communication driver: "A/QnA/L/QCPU, L/QJ71C24") for the GOT of the computer link connection (Communication driver: "AJ71QC24, MELDAS C6*") is used.

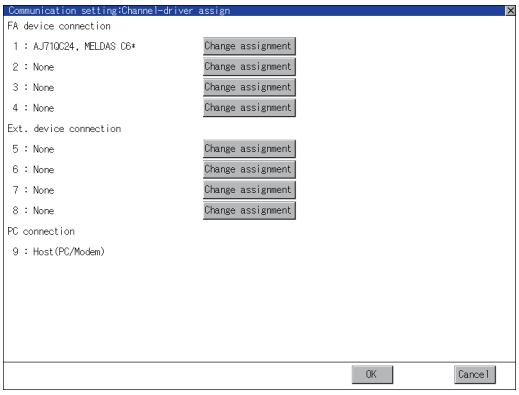
POINT

Before the operation

The GOT automatically restarts after executing this setting.
If project data has been downloaded, the GOT starts monitoring of the controller after restarting.
Execute this setting after carefully confirming the safety.

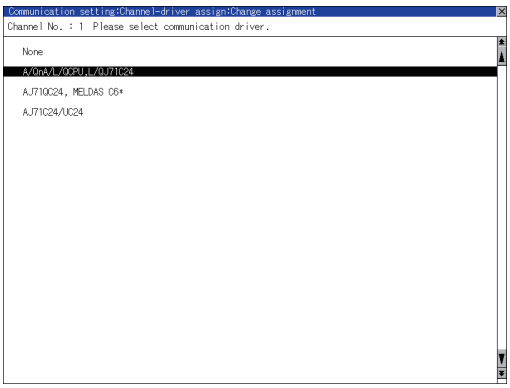


1. Install communication driver "A/QnA/L/QCPU, L/QJ71C24" to GOT.
(Download of [Communication Setting] from GT Designer3 or GT Designer2 is not required.)
After installing communication driver, touch the [Channel Driver assign] button in [Communication Setting].

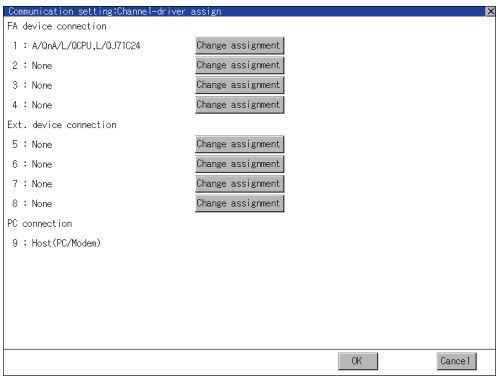


2. Touch the [Change assignment] button on the dislayed screen as shown left.

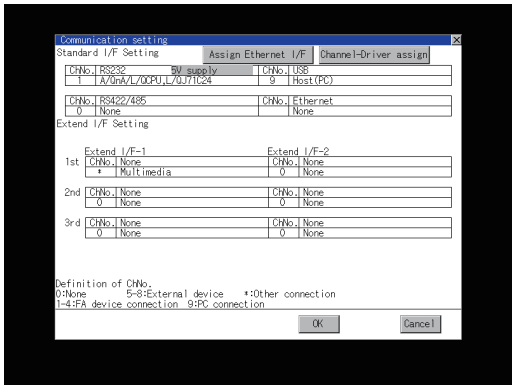
(Continued to next page)



3. As the communication driver ([A/QnA/L/QCPU, L/QJ71C24]) installed in the GOT is displayed, touch it.



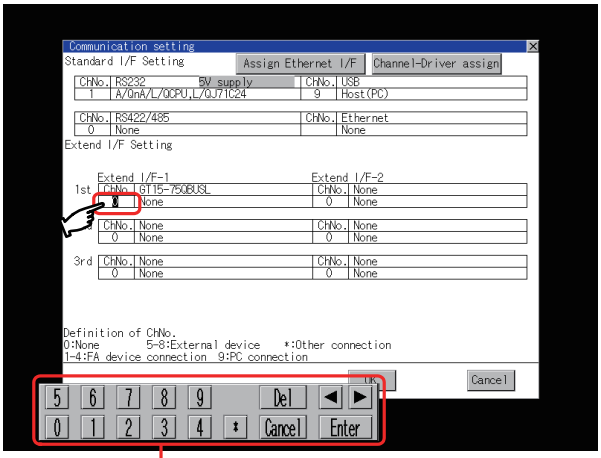
4. The screen returns to the [Channel-Driver assign] screen. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Communication Setting] screen. If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Communication Setting] screen.



5. Confirm that the selected communication driver ([A/QnA/L/QCPU, L/QJ71C24]) is assigned.

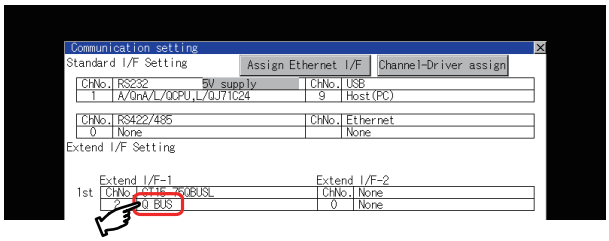
6. After the confirmation, if touch the [OK]/ [Cancel]/ button, the GOT restarts and operates with the changed settings.

■ Channel number setting operation



Keyboard

1. Touch channel number specification menu BOX to be set.
2. The cursor for the channel number specification menu BOX is displayed.
   Simultaneously the keyboard for a numerical input is displayed.



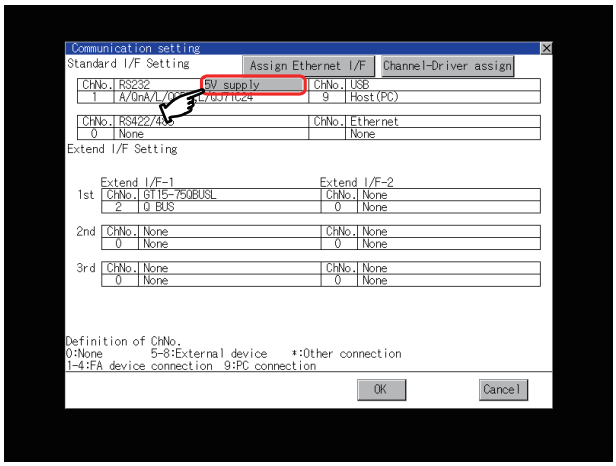
3. Input the channel number from the keyboard and touch [Enter] key, and the value is defined.
   Simultaneously, the name of the communication driver corresponding to the channel number assigned by GT Designer3 or GT Designer2 is displayed in the driver display BOX.

■ Communication detail setting switching operation

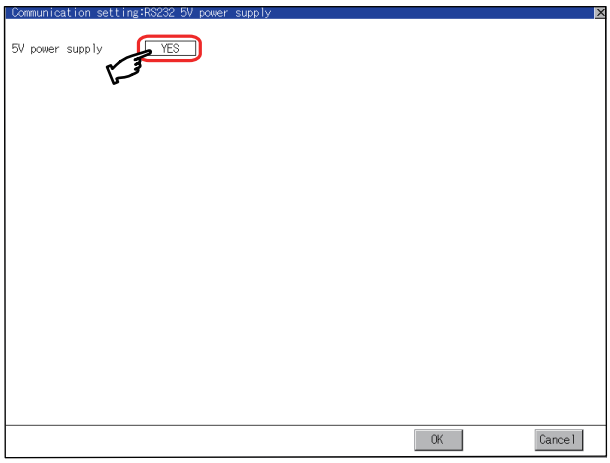
1. If the driver display BOX is touched on the communication setting screen or Ethernet I/F assign screen, the screen switches to the detailed setting screen of the related controller device.
   (☞ 3.2 Communication Detail Setting)

■ 5V power supply setting operation

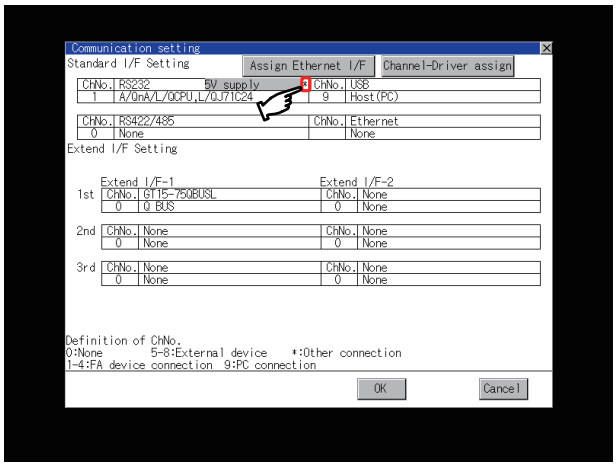
When connecting a controller to the RS-232 interface, whether to supply 5VDC power or not to the controller through 9 pins can be selected.
Thus, it is not necessary to connect an external power supply.
When setting the RS-232 interface to "9" (Host (PC)), the 5V supply is automatically changed to [NO].



1. Touch [5V supply].



2. Select whether 5V power supply is supplied or not.
If touch the [OK] button, the changed settings are reflected and the screen returns to the [Communication Setting] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Communication Setting] screen.

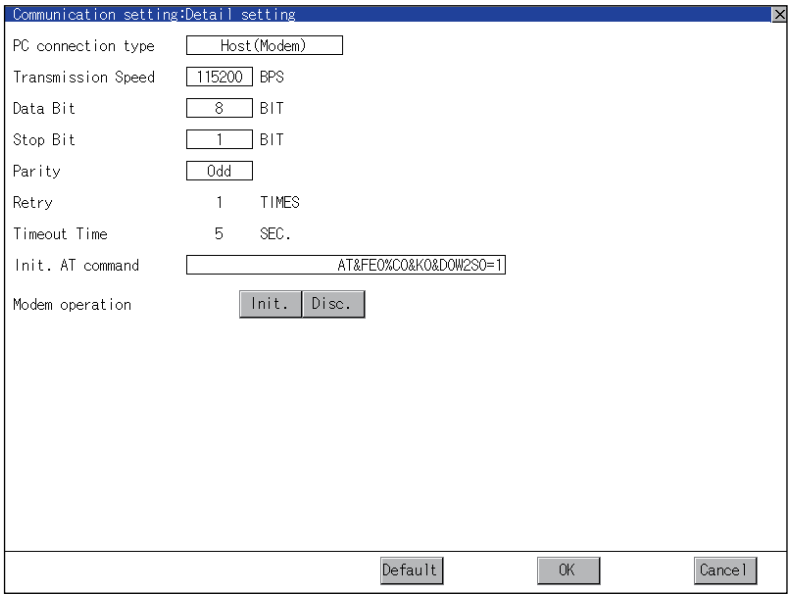


3. After setting completion, [∗] is displayed indicating that 5V power supplying setting is on.

4. If touch the [OK]/[Cancel]/☒ button, the GOT restarts and operates with the changed settings.

■ Host (PC)/Host (Modem) settings

The following describes how to set [Host (PC)] and [Host (Modem)].
When setting [Host (PC)] for [PC connection type], the following settings are not required.
Set as follows only when selecting [Host (Modem)].

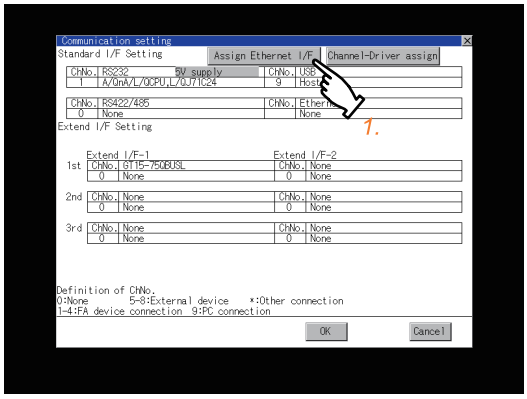


Item	Description	Setting range
PC connection type	The connecting method to the personal computer can be selected.	Host (PC)/Host (Modem) <Default: Host (PC)>
Transmission Speed	Set the transmission speed for communication.	9600/19200/38400/57600/115200 <Default: 115200>
Data Bit	Set the data bit for communication.	7/8 <Default: 8>
Stop Bit	Set the stop bit for communication.	1/2 <Default: 1>
Parity	Set whether to check the parity for communication and select the format to check.	Odd/Even/None <Default: Odd>
Retry (TIMES)	Displays the number of retry (times) for communication.	<Default: 1 (fixed)>
Timeout Time (SEC.)	Displays the timeout time (sec.) for communication.	<Default: 1 (fixed)>
Init. AT command	Set the AT command to initialize the modem.	English one byte characters within 255 characters*1 <Default: AT&FE0%C0&K0&D0W2S0=1>
Modem operation	Touch the [Init.] button to initialize the modem. Touch the [Disc.] button to disconnect the line.	-

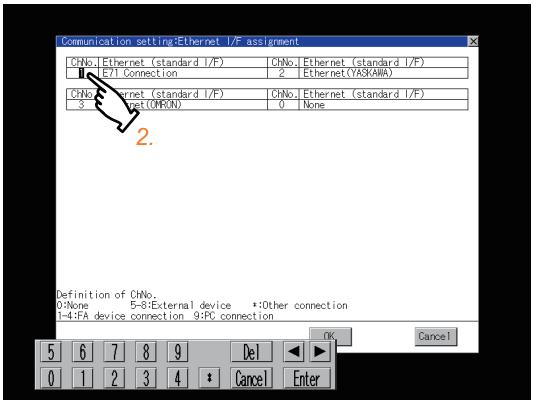
*1 The maximum number of characters of the AT command depends on the specifications of the modem.
When the maximum number of characters of the AT command which can be used for a modem is less than 255, the initializing command is set according to the specifications of the modem.

■ Assign Ethernet I/F operation

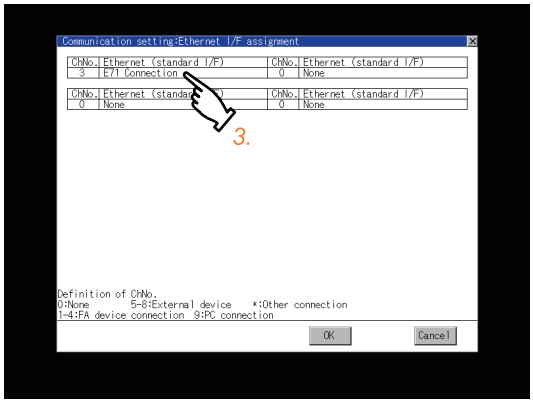
The following describes how to operate the Ethernet I/F assign.
The setting operation is same as that of the communication setting screen.



1. Touch the [Assign Ethernet I/F] button in [Communication Setting].



2. After the screen shown left is displayed, touch the channel number specification menu BOX when changing the channel number.
(☞ ■Channel number setting operation in this section)



3. For changing the parameter settings, touch the driver display BOX.
(☞ 3.2 Communication Detail Setting)

4. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Communication Setting] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Communication Setting] screen.

5. In the [Communication Setting] screen, touching the [OK]/[Cancel]/[☒] button restarts and operates the GOT with the changed settings.

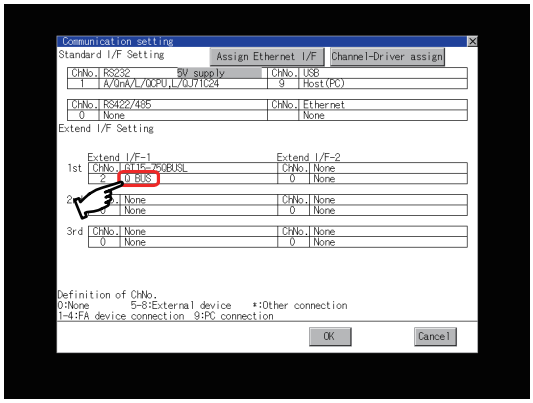
3.2 Communication Detail Setting

3.2.1 Communication detail setting functions

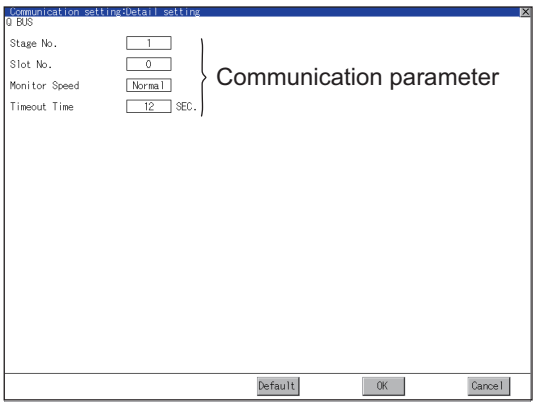
Function	Description	For GT Designer2	For GT Designer3
Communication parameters setting	Set various communication parameters of communication devices. The settable parameters differ according to the communication device.	○	○
Keyword setting	For the FX series PLCs, key word for protecting program in the PLC can be set.	○	○
Key word deleting	For the FX series PLCs, key word for protecting program in the PLC can be deleted.	○	○
Key word protection cancel	For the FX series PLCs, the program protection status in the PLC can be cancelled.	○	○
Keyword protection	For the FX series PLCs, the cancelled program protection status in the PLC can be returned to the protection status again.	○	○

3.2.2 Communication detail setting display operation

■ Communication settings



1. Touch the driver display BOX of the communication parameter to be set in the communication setting screen.



2. The screen switches to the detail setting screen. Set communication parameters from this screen.
Refer to the following for the setting change operation.
1.3.3 Basic operation of settings change

POINT

(1) Communication parameter setting by GT Designer3 or GT Designer2

Set the communication parameters for each communication driver at [Communication Settings] in [Controller Setting] of GT Designer3 or in [System Environment] of GT Designer2.
When change the communication parameters after downloading project data, change the setting at communication detail setting of GOT.

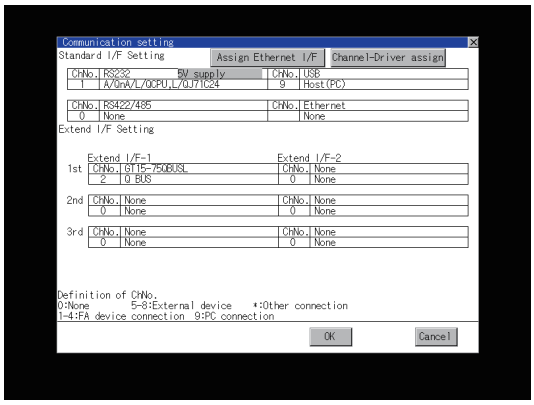
☞ •GOT1000 Series Connection Manual for GT Works3 and a controller used
(1.1 Setting the Communication Interface)
•GT Designer2 Version ☐ Screen Design Manual
(3.7 Communication Interface Setting (Communication setting))

(2) For the Ethernet multiple connection

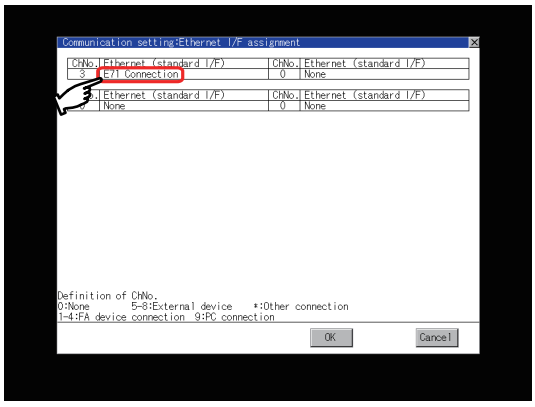
Touch the driver display BOX of the Ethernet connection, and then the communication detail setting screen of Channel No. 1 is displayed.

■ Assign Ethernet I/F

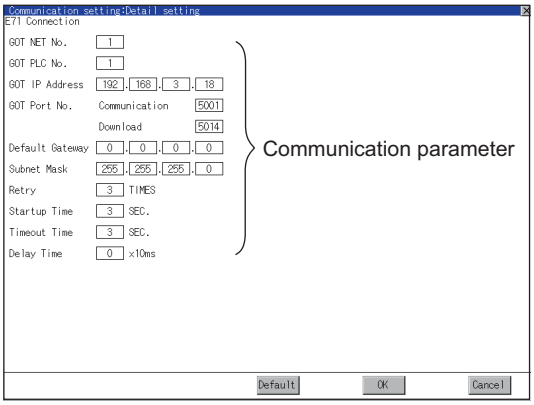
Several drivers are assigned to the same Ethernet interface. However, only one GOT IP address is assigned per interface.
By changing the settings of one interface, the GOT IP address, GOT port No. download, default gateway and subnet mask settings of other drivers, which are assigned to the same interface, are also changed.



1. Touch the [Assign Ethernet I/F] button in Communication Setting.



2. Touch the driver display BOX of the communication parameter to be set in the [Ethernet I/F assignment] screen.



3. The screen switches to the detail setting screen.
Set communication parameters from this screen.
Refer to the following for the setting change operation.
1.3.3 Basic operation of settings change

POINT

Communication parameter setting by GT Designer3 or GT Designer2

Set the communication parameters for each communication driver at [Communication Settings] in [Controller Setting] of GT Designer3 or in [System Environment] of GT Designer2.
When change the communication parameters after downloading project data, change the setting at communication detail setting of GOT.

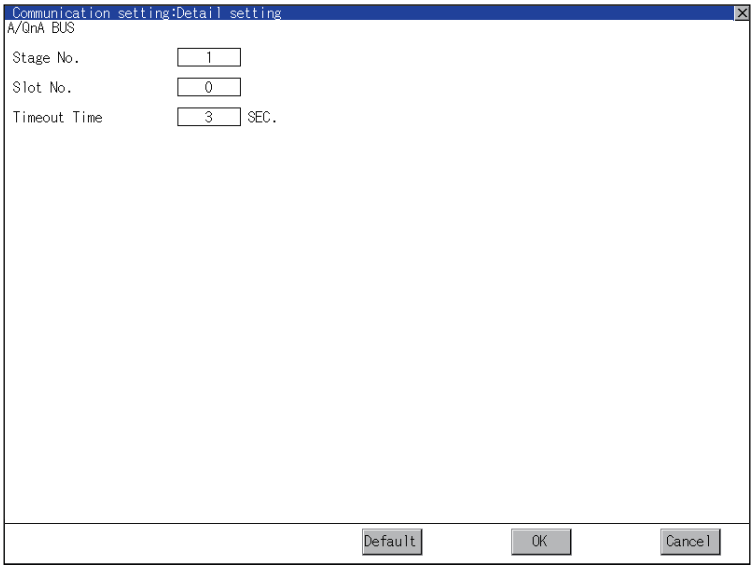
•GOT1000 Series Connection Manual for GT Works3 and a controller used
(1.1 Setting the Communication Interface)
•GT Designer2 Version ☐ Screen Design Manual
(3.7 Communication Interface Setting (Communication setting))

3.2.3 Display contents of communication detail setting

The contents of communication detail setting varies according to driver type.

This section explains setting items different from the communication detail setting of the GT Designer3 or GT Designer2. For setting items other than described in this section, refer to the following manual.

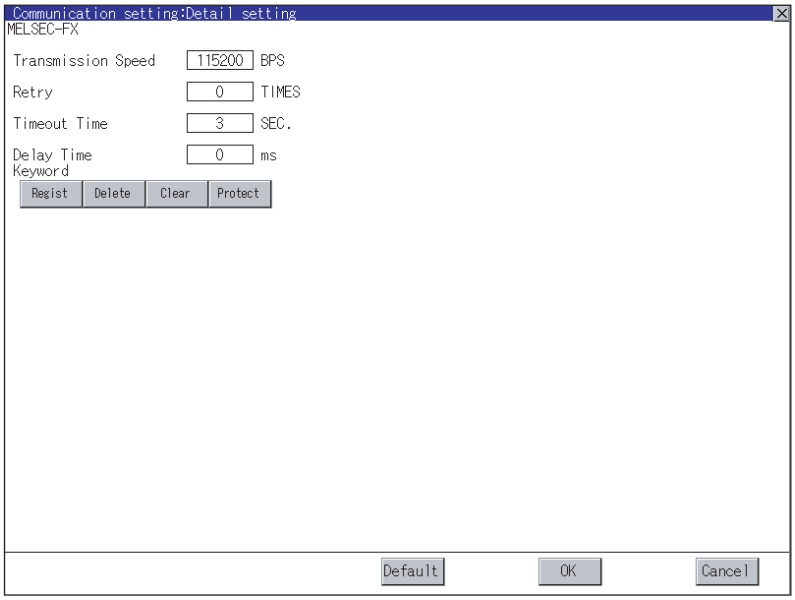
•GOT1000 Series Connection Manual for GT Works3 and a controller used
(1.1 Setting the Communication Interface)
•GT Designer2 Version □ Screen Design Manual
(3.7 Communication Interface Setting (Communication Settings))



For bus (A/QnA)

■ Key word registration, deletion and protection delete

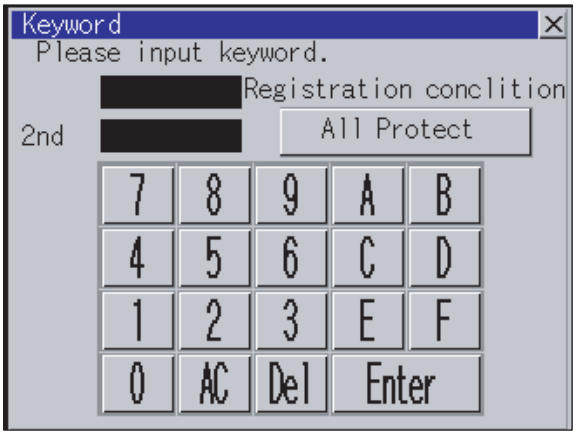
MELSEC-FX



(1) Registration

Register key words.

1. Touching the [Regist] key pop-up displays the keyboard for inputting a keyword.
2. Input a keyword and touch the [Enter] key, and the registration completes.
   Up to 8 characters can be set for keyword with using A to F and 0 to 9.



PLC connected	Setting	
	When registering keyword and 2nd keyword	When registering keyword only
FX CPU compatible with 2nd keyword	[Registration condition]*1 can be selected.	[Registration condition]*1 cannot be selected.
FX CPU not compatible with 2nd keyword	—	

*1 [Registration condition]
The access restriction can be selected from [Read/Write Protect], [Write Protect], and [All Protect].
For access restriction on each setting, refer to the following manual.

☞ The User's Manual of the FX series PLC you are using

POINT

(1) How to select a keyword protection level

For equipments that are allowed to operate the FX PLC on line, 3 levels of protection level can be set.
When performing monitoring or changing settings with any on-line equipment is required, set password with referring to the following.

(a) When setting keyword only
Select a protection level by the initial letter of keyword.
All operation protect : Set a keyword with initial letter of "A", "D" to "F", or "0" to "9".
Read/Incorrect write protection : Set a keyword with initial letter of "B".
Incorrect write protect : Set a keyword with initial letter of "C".

(b) When setting keyword and 2nd keyword
Select a protection level by [Registration condition].

(2) Monitoring availability at each keyword protection level

Device monitoring availability at each keyword protection level is shown in the following.

Item		When registering keyword only			When registering keyword and 2nd keyword			Keyword not registered or protection cancelled
		All operation protect	Read/ Incorrect write protection	Incorrect write protect	All on-line operation protect	Read/write protect	Write protect	
Monitoring devices		○	○	○	×	○	○	○
Changing devices	T, C set value and file register (D1000 and the following)	×	×	×	×	○	○	○
	Other than the above	○	○	○	×	○	○	○

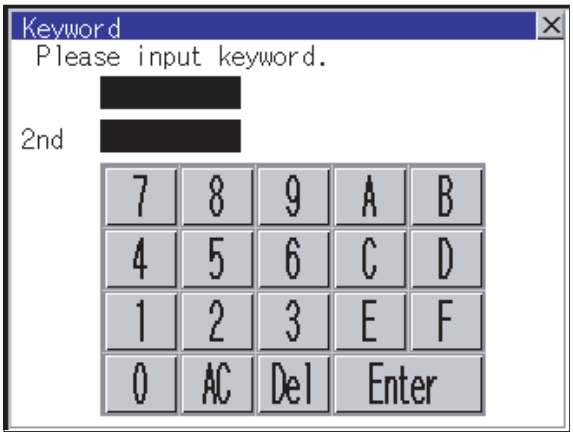
(3) Difference between all online operations prohibition and all operations prohibition

When specifying All online operations prohibited, displaying devices and inputting data with a programming tool or GOT are all prohibited.
When all operations are prohibited, displaying devices and inputting data with the GOT are enabled while all operations using a programming tool are prohibited.

(2) Deletion

Delete a registered keyword.

1. Touching the [Delete] key pop-up displays the keyboard for inputting a keyword.
2. Input a key word and touch the [Enter] key, and the keyword is deleted.

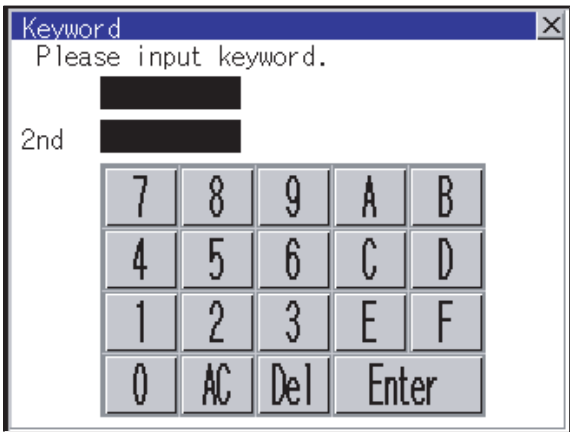


PLC connected	Setting
FX CPU compatible with 2nd keyword	Input a keyword to delete.
FX CPU not compatible with 2nd keyword	Input the keyword to delete only into the keyword. The 2nd keyword will be ignored.

(3) Protection delete

Delete the protection by key word in order to access to a FX PLC to which a key word is registered.

1. Touching the [Clear] key pop-up displays the keyboard for inputting a keyword.
2. Input a keyword and touch the [Enter] key to delete the protection.



PLC connected	Setting
FX CPU compatible with 2nd keyword	Input a keyword to delete the protection.
FX CPU not compatible with 2nd keyword	Input a keyword to delete only into the keyword. The 2nd keyword will be ignored.

(4) Protection

Reset the keyword in which protection has been deleted to the protection status.

1. Touch the [Protect] key, and the keyword goes to a protected status.

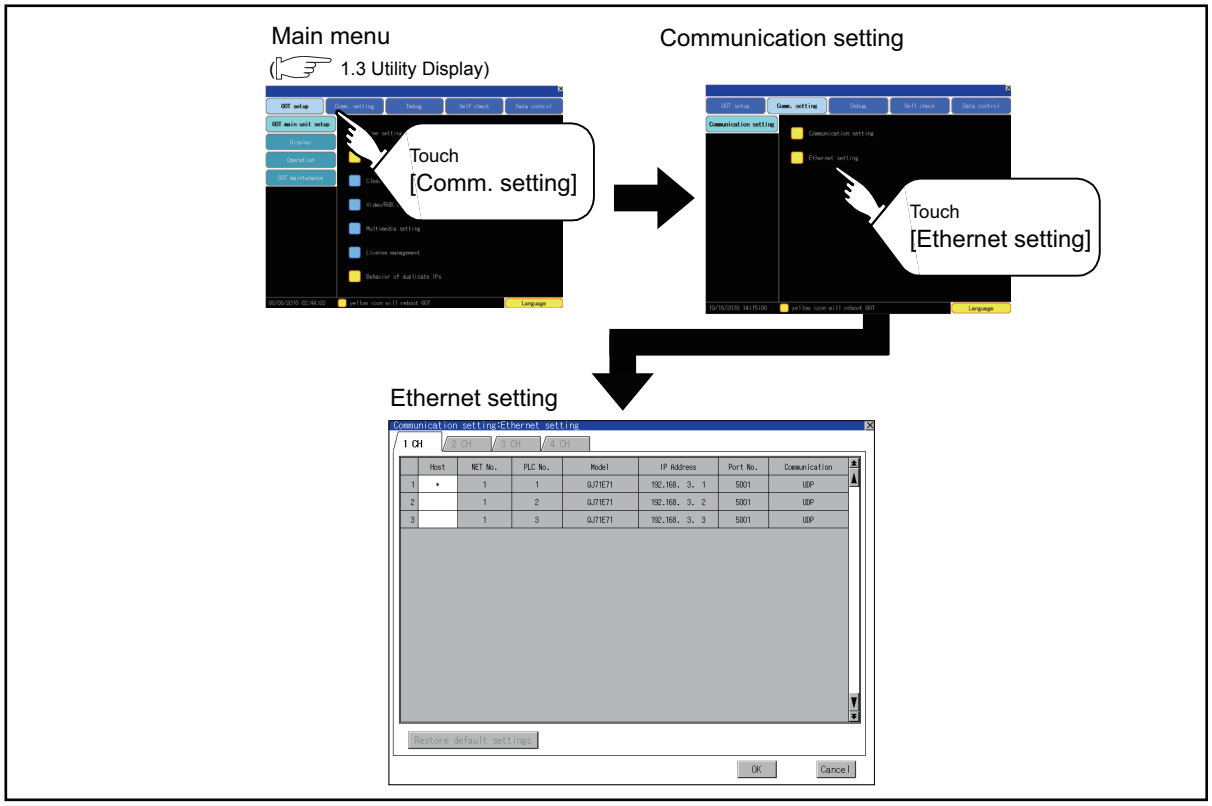
3.3 Ethernet Setting

3.3.1 Ethernet setting function

The contents of the Ethernet set in GT Designer3 can be checked.
The setting of the host station can be changed.
For the Ethernet setting, refer to the following.

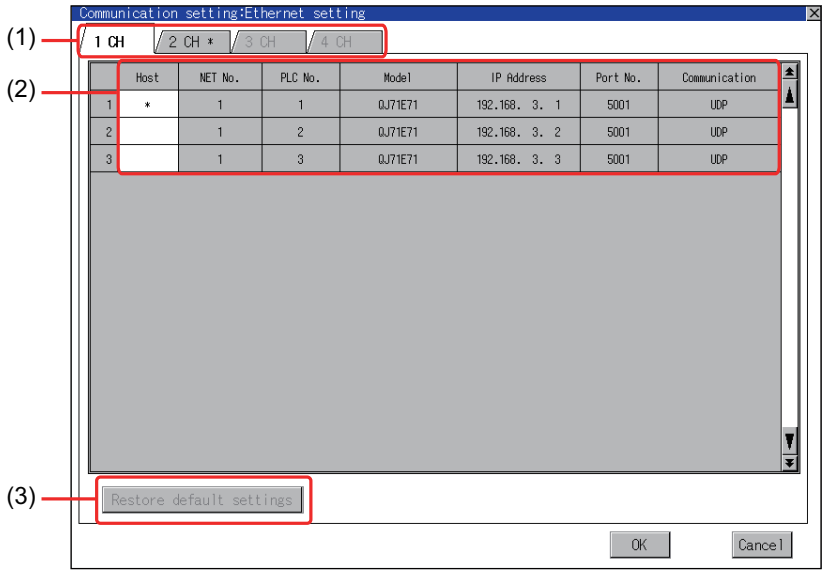
GOT1000 Series Connection Manual for GT Works3 and a controller used

3.3.2 Display operation of Ethernet setting



3.3.3 Display contents of Ethernet setting

The following describes the setting items and the display contents of the Ethernet setting.



(1) Channel select tab

Channels can be switched.
Switching to the channel which does not have the Ethernet setting is not available.
[*] is displayed on the tab of the channel whose setting is changed.

(2) Ethernet setting items

The contents of the Ethernet setting configured in GT Designer3 are displayed.
The setting of the host station can be changed.

☞ ■Change of host

(3) Restore default settings

If touch this button, the change of the setting is canceled and the setting returns to the status when the project data was written.

POINT

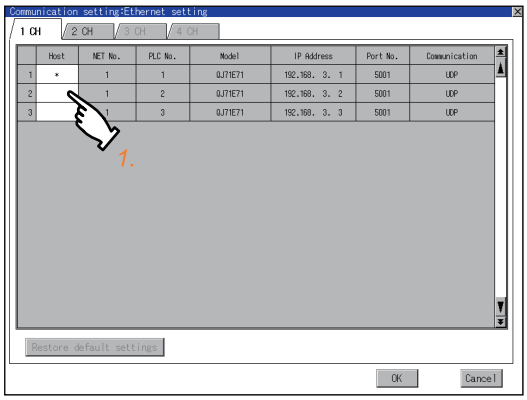
(1) How to cancel the change of the setting in the [Ethernet setting] screen.

Cancel the settings changed in the [Ethernet setting] screen with the [Restore default settings] button.
The changed settings remain until they are canceled with the [Restore default settings] button.
The changed settings are not canceled even if writing the project data or OS to the GOT.
When the project data is written to the GOT without canceling the changed settings, those changed settings are reflected to the Ethernet setting of the written project data.
(If the written project data does not have a channel with same Ethernet settings as that of the channel changed in [Ethernet setting] screen, the changed settings are not reflected.)

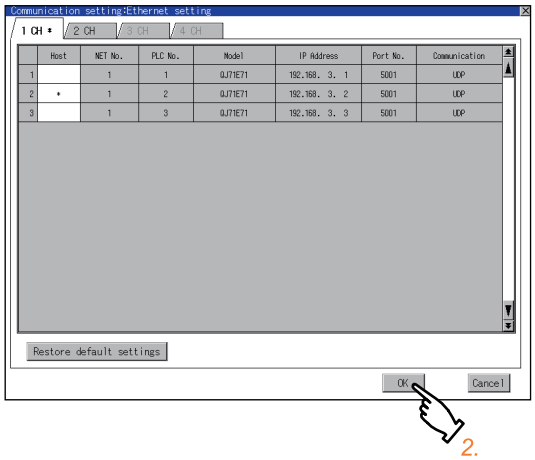
(2) Range where the settings changed in the [Ethernet setting] screen are reflected

The settings changed in the [Ethernet setting] screen are valid in the GOT. On the other hand, they are not overwritten to the project data written to the GOT.
The changed settings are not reflected to the project data which is read from the GOT after changing the settings.
If the GOT data is copied with the GOT data package acquisition, the change in the [Ethernet setting] screen is reflected to the copied data.

■ Change of host



1. Touch the device to be set as the host.



2. If touch the [OK] button, the GOT restarts and operates with the changed settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Communication Setting] screen.

4. DEBUG

In this manual, the overview of the debuggingfunction and the operation procedure until displaying the screen are described.
For display contents and operation procedure of debuggings, refer to the following manual.

☞ •GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3
•GOT1000 Series Extended/Option Functions Manual for GT Designer2/GT Works2

The following describes the functions available as the debugging function.

Item	Description	For GT Designer2	For GT Designer3	Reference
Monitor screens	System monitor, Ladder monitor, Network monitor, intelligent module monitor, servo amplifier monitor, CNC monitor, A list editor, List editor for MELSEC-A, SFC monitor, Ladder editor, MELSEC-L troubleshooting, Log viewer, Motion SFC monitor, Motion program (SV43) editor	△	○	4.1
Debug setting	Q/L/QnA ladder monitor setting, Backup/restoration setting	○	○	4.2
Memory/data control	Backup/restoration function, GOT data package acquisition, CNC data I/O, Memory card format, Memory information, USB device status display, SRAM control, Motion program (SV43) I/O	△	○	4.3

4.1 Monitor Screens

4.1.1 Function of monitor screens

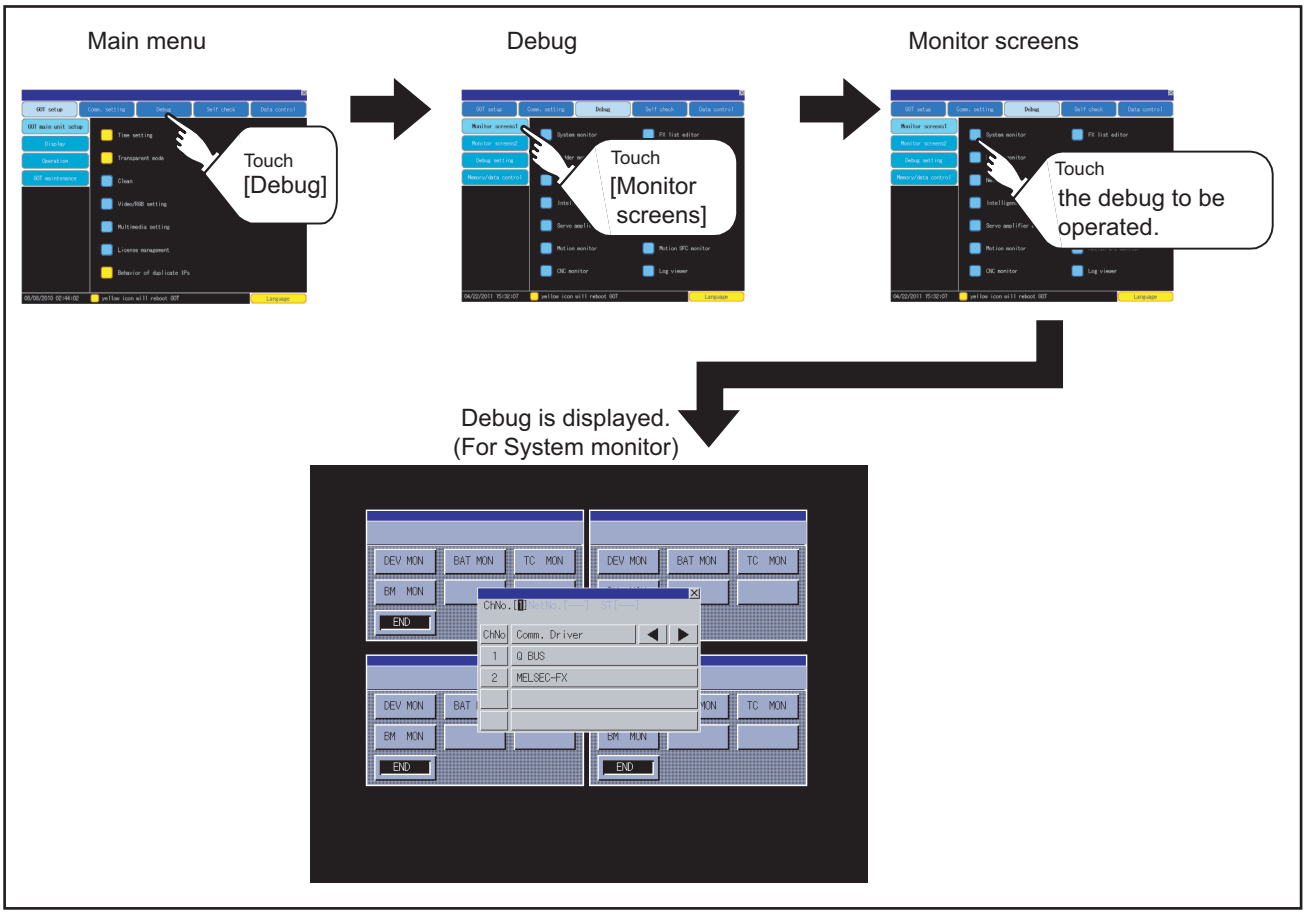
The Monitor screens are designed to confirm the device status of PLC CPU and to make the response for PLC system trouble more efficient.
The following shows the functions that can be performed with the Monitor screens.

Item	Description	For GT Designer2	For GT Designer3
System monitor	The device of PLC CPU and buffer memory of intelligent function module can be monitored or tested.	○	○
Ladder monitor	The program of PLC CPU can be monitored in ladder format.	○	○
Network monitor	The network status of the MELSECNET/H, MELSECNET(II), CC-Link IE Controller Network and CC-Link IE Field Network can be monitored.	○	○
Intelligent unit monitor	Buffer memory in the intelligent function module can be monitored or the data can be changed on the dedicated screen. And the signal status of I/O modules can be monitored.	○	○
Servo amplifier monitor	Various monitor functions, parameter change, test operation, etc. of the servo amplifier are available.	○	○
Motion monitor	The servo monitoring and parameter settings of the motion controller CPU (Q series) are available.	○	○
CNC monitor	Functions equivalent to the MELDAS dedicated display, such as Position Display Monitor, Alarm Diagnosis Monitor, Tool Offset/Param, and Program Monitor, are available.	○	○
A list editor	The sequence program of ACPU can be list edited.	○	○
FX list editor	The sequence program of FXCPU can be list edited.	○	○
SFC Monitor	The GOT can monitor and display SFC programs of the PLC CPU in the SFC diagram format (MELSAP3 or MELSAP-L format).	○	○

(Continued to next page)

Item	Description	For GT Designer2	For GT Designer3
Ladder editor	The sequence program of PLC CPU can be edited.	○	○
MELSEC-L troubleshooting	The status of MELSEC-L CPU and buttons for functions related to the troubleshooting are displayed.	×	○
Log viewer	Logging data collected by the high speed data logger module and the LCPU can be browsed, and the logging data can be read via the GOT.	×	○
Motion SFC monitor	The motion SFC program and devices in the motion controller CPU (Q series) can be monitored.	×	○
Motion program (SV43) editor	This function is available for a motion controller OS (SV43) special model. For details of this function, please contact our company.	×	○

4.1.2 Display operation of monitor screens



4.2 Debug Setting

4.2.1 Q/L/QnA ladder monitor setting

Storage locations and others for data to be used for the ladder monitor function can be set.
Saving the ladder data cuts out the need for reading the ladder data from PLC CPU at the next GOT start-up, enabling to start the ladder monitoring earlier.
Refer to the following manual for details of the ladder monitoring function.

☞ •GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3
•GOT1000 Series Extended/Option Functions Manual for GT Designer2/GT Works2

Function	Description	Setting range	For GT Designer2	For GT Designer3
Data save location	Select the ladder data storage location of the Q/L/QnA ladder monitor.	C: Flash Memory/B: Memory card/A: Built-in CF Card/Not store <Default: A:Built-in CF card>	○	○
Automatic program read	Whether to automatically read sequence program when the ladder monitor starts from a touch switch or Advanced Alarm Display can be selected.	YES/NO <Default: YES>	○	○
Priority comment	If both Common comment and Each program comment are set for the same device in a sequence program, select either of the comments to be displayed in the ladder monitor.	Common comment/Each program comment <Default: Common comment>	○	○
Local device monitor	Select if monitoring local devices are executed or not when monitoring devices with the ladder monitor. (Applicable to only the MELSEC-Q series ladder monitor)	YES/NO <Default: NO>	○	○
Drive for device comment	Select the drive to be used for reading comment data for the ladder monitor.	A:Built-in CF card/B:Memory card <Default: A:Built-in CF card>	○	○
Comment setting	Select if the comment data used in the ladder monitor is displayed/hidden.	Hide comment/Display comment/32-char comment <Default: Hide comment>	×	○
Setting to save ladders	Select [Save a ladder program]/[Save ladder programs] for the save setting of ladder data to be used in the ladder monitor.	Save ladder programs/Save a ladder program <Default: Save a ladder program>	×	○

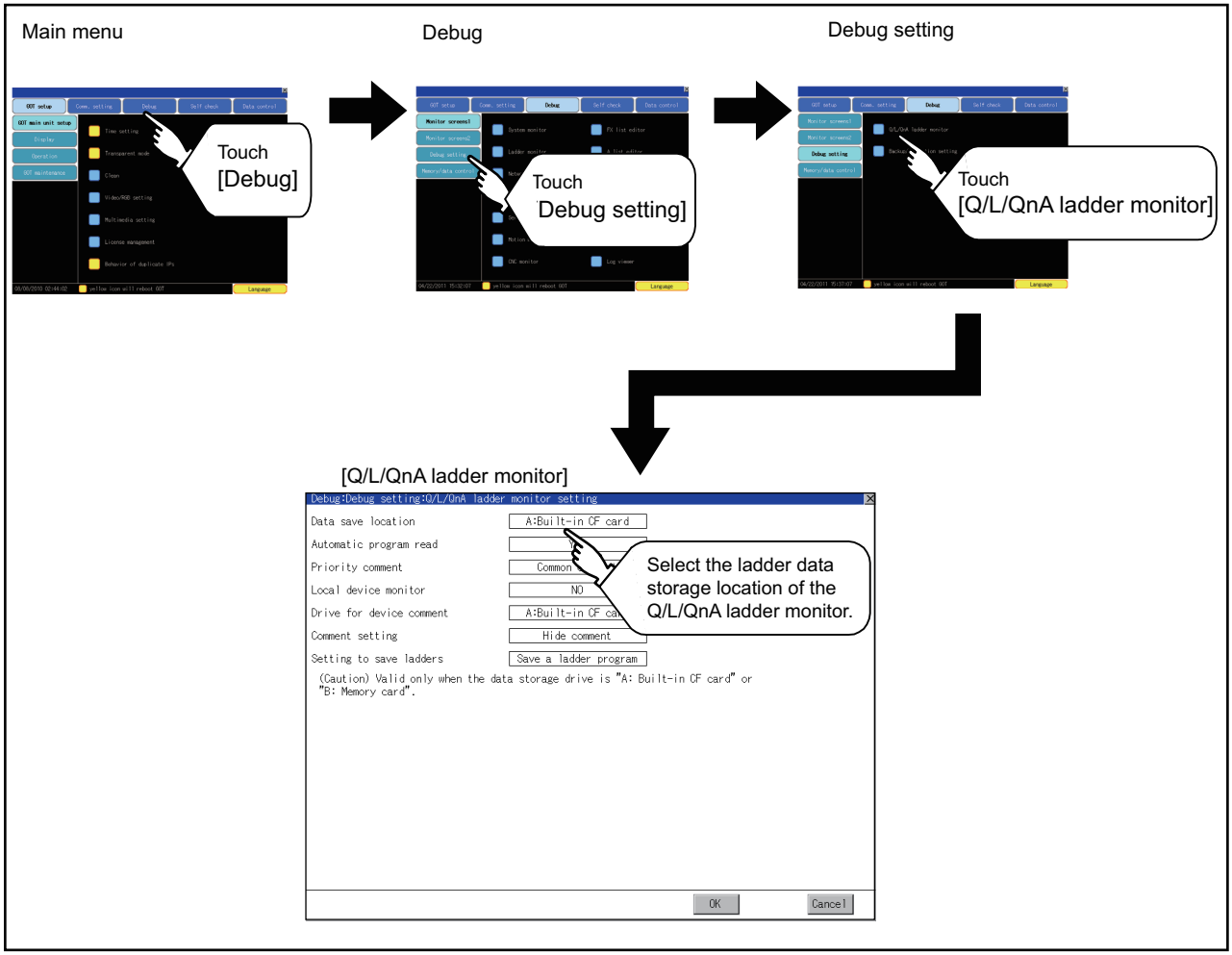
POINT

Ladder data to be saved

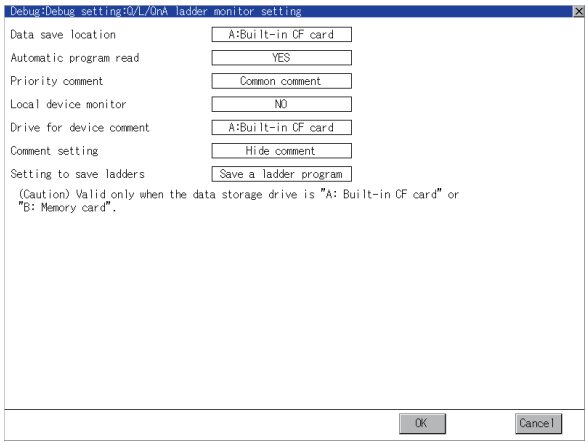
(a) The ladder data to be saved is used by the GOT to execute ladder monitoring.
The ladder data can be saved in the CF card with this function, however it cannot be copied in the PC to be referred/edited with GX Developer, etc.
The name of the ladder data to be stored can be checked with the project information.
For how to check the name of ladder data, refer to the following.
☞ 6.3.2 ■Display operation of project information

(b) The ladder data saved in the built-in flash memory and CF card or USB memory (file name: CIRDAT) can be deleted by selecting [Project information] in [OS/project information] of [Data control].
☞ 6.3.2 ■Operation of project information

■ Display operation of Q/L/QnA ladder monitor



■ Q/L/QnA ladder monitor setting operation



1. Setting items are changed if setting item is touched.
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Debug Setting] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Debug Setting] screen.

4.2.2 Backup/restoration setting

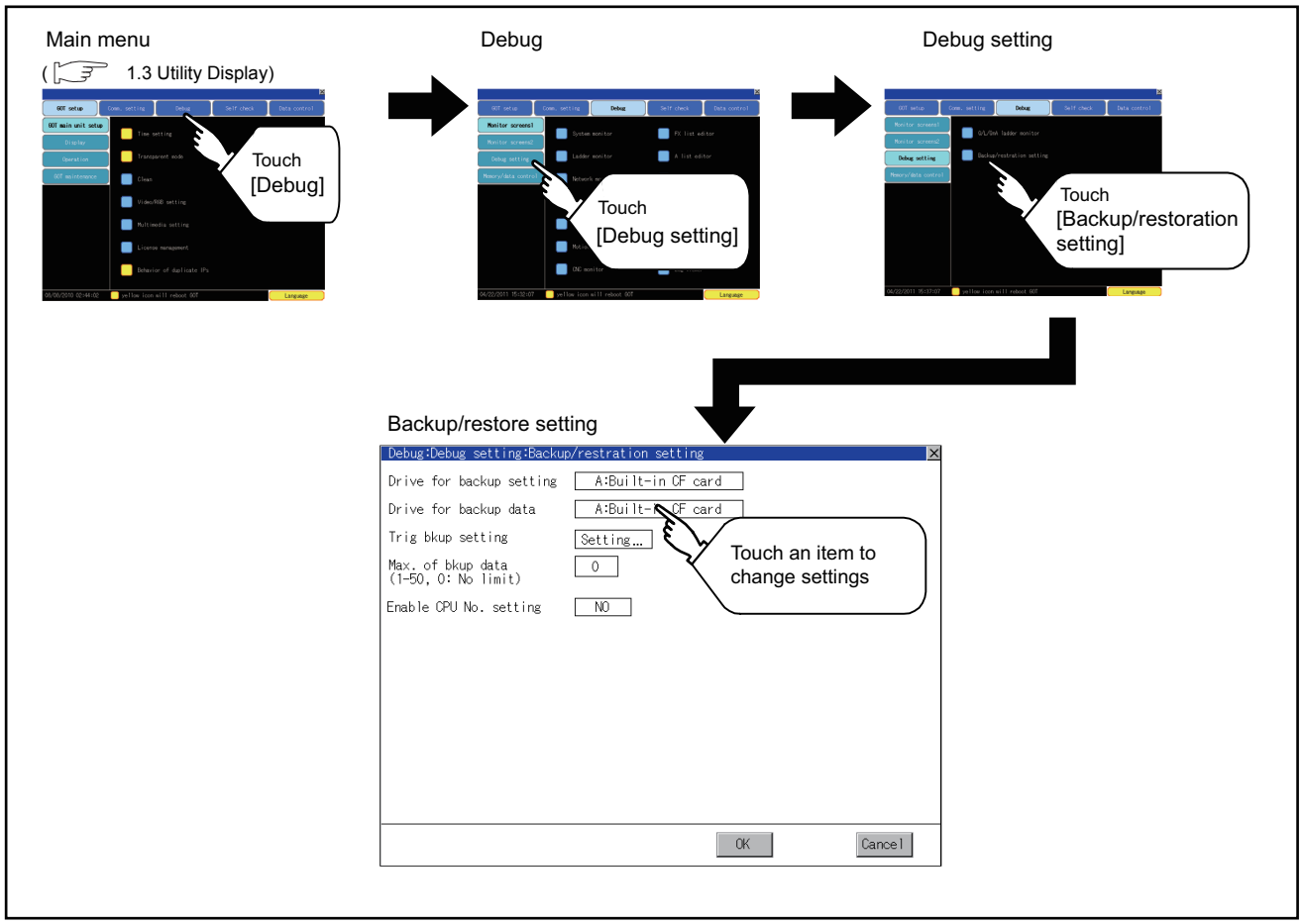
The storage location for backup data can be set.
For how to use the backup/restoration, refer to the following manual.

☞ • GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3 (11 BACKUP/RESTORE)
• GOT1000 Series Extended/Option Functions Manual for GT Designer2/GT Works2 (11 Backup/restore)

Set the following items with touching the items on the GOT.

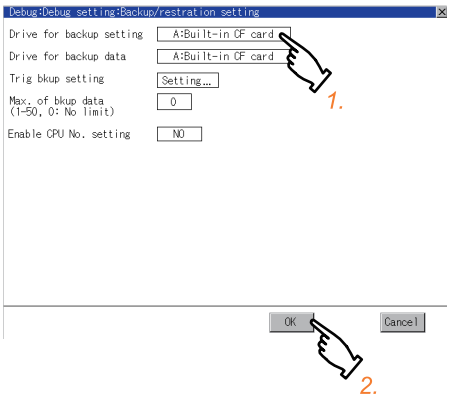
Function	Description	Setting range	For GT Designer2	For GT Designer3
Drive for backup setting	The drive for storing backup settings, including parameters and passwords for controllers, can be selected.	A: Standard CF Card B: Memory card E: USB drive <Default: A: Standard CF Card>	○	○
Drive for backup data	The drive for storing backup data can be selected.	A: Standard CF Card B: Memory card E: USB drive <Default: A: Standard CF Card>	○	○
Trigger backup setting	The GOT automatically backs up data when triggers (Rise, Time) specified for each backup setting are met.	None/Rise/Time <Default: None> ☞ 4.2.3 Trigger backup settings	○	○
Max. of backup data	Set the maximum number of backup data to be stored. (When 0 is specified, the GOT does not check the number of backup data to be stored.)	Setting range: 0 to 50 <Default: 10>	○	○
Enable CPU No. setting	Set whether to enable the CPU No. setting or not.	YES/NO <Default: NO>	×	○

■ Display operation of backup/restoration setting



■ Backup/restoration setting operation

(1) Drive for backup setting, drive for backup data



1. Touch a setting item, and then the setting is changed.

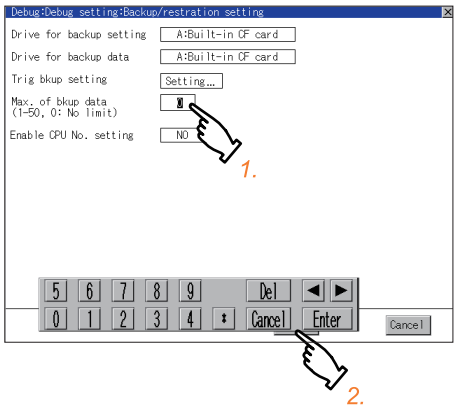
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Debug Setting] screen.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Debug Setting] screen.

(2) Trigger backup setting

For operations of the trigger backup setting, refer to the following.

4.2.3 Trigger backup settings

(3) Max. number of backup data

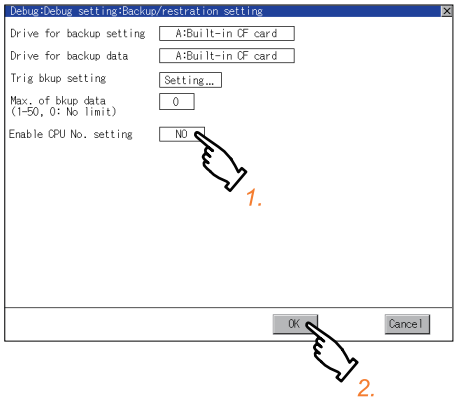


1. Touch the setting item, and then a keyboard appears.
   Input values with the keyboard.

   Setting range: 0 to 50, Default: 10
   (When 0 is specified, the GOT does not check the number of backup data to be stored.)

2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Debug Setting] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Debug Setting] screen.

(4) Enable CPU No. setting



1. Touch a setting item, and then the setting is changed.

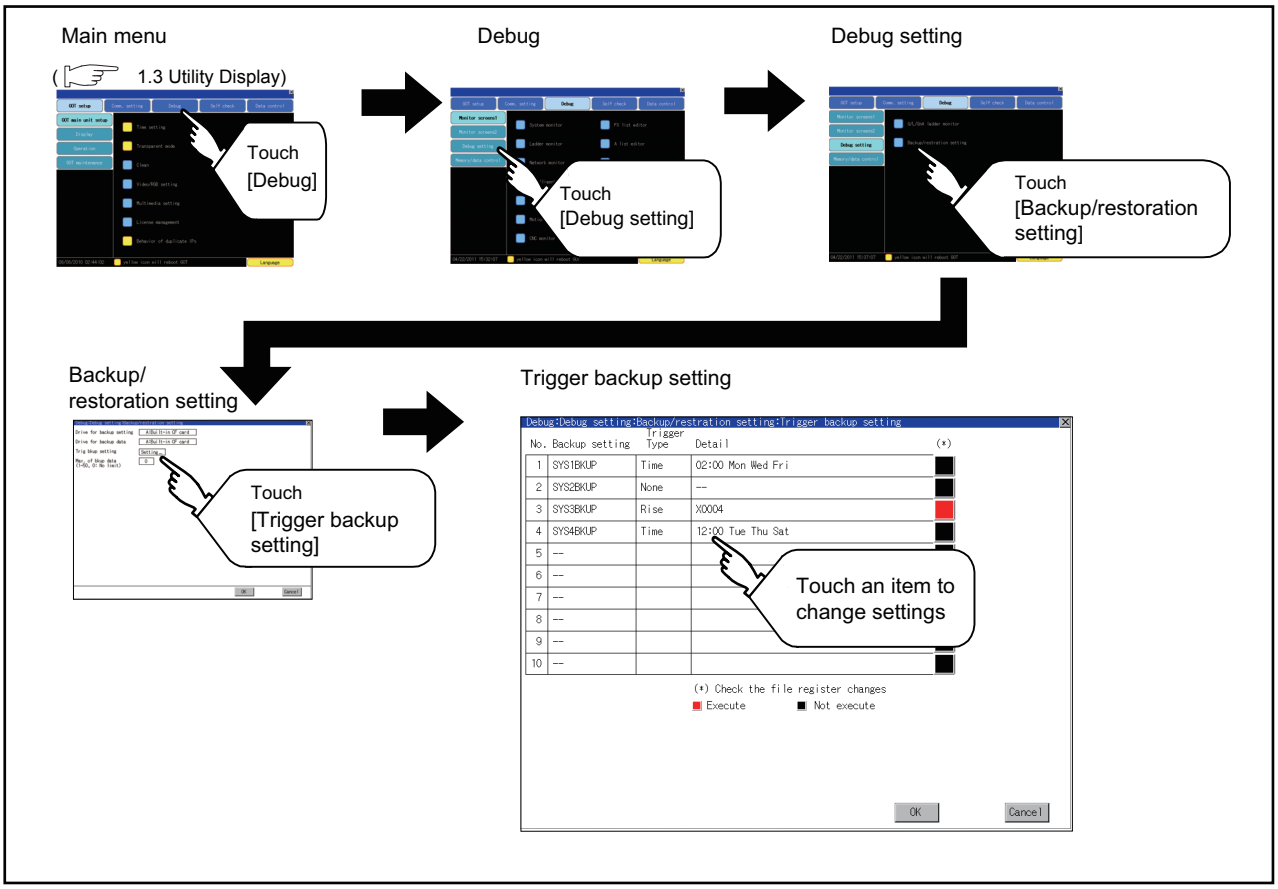
2. If touch the [OK] button, the changed settings are reflected and the screen returns to the [Debug Setting] screen.
   If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Debug Setting] screen.

4.2.3 Trigger backup settings

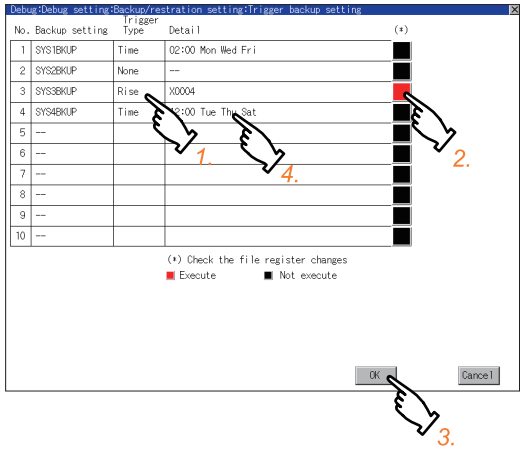
When the conditions of the trigger specified for each backup setting (Rise, Time) are met, the GOT automatically backs up data.
How to use the trigger backup, refer to the following manual.

- GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3 (11 BACKUP/RESTORE)
- GOT1000 Series Extended/Option Functions Manual for GT Designer2/GT Works2 (11 Backup/restore)

■ Display operation of trigger backup setting



■ Trigger backup setting operation



1. Touch a setting item for the trigger type, and then the setting is changed.

(None → Rise → Time → None)

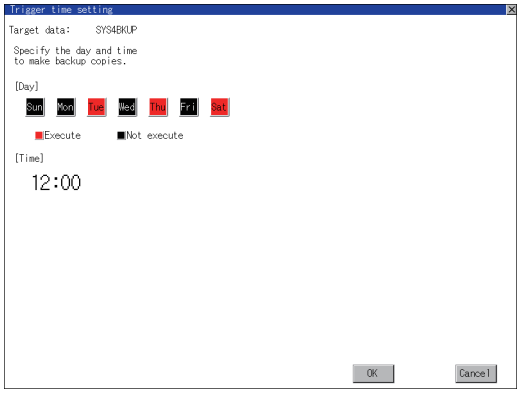
None	:	The GOT does not execute the trigger backup.
Rise	:	The GOT backs up data when the trigger device turns on.
Time	:	The GOT backs up data at the specified time.

2. Touch a setting item for [Check the file register changes], and then the setting is changed.

Execute : When the backup is executed, the GOT checks if data stored in file registers are changed after the previous backup. When the data are changed, the GOT backs up the changed data.

Not execute : When the backup is executed, the GOT does not back up data stored in file registers even if the data are changed after the previous backup.

3. When the trigger type is changed, a password input window appears by touching the [OK] button.
Input the password for the backup/restore.
When the password is verified, the settings are reflected, and then the screen returns to the [trigger backup setting] screen.
When the trigger type is not changed, touching the [OK] button reflects the settings.
If touch the [Cancel] button, the changed settings are canceled and the screen returns to the [Backup/restoration] screen.



4. When the trigger type is set to [Time], touch a setting item for [Detail] and the screen is switched to the trigger time setting screen.
In the screen, specify the days and time that the GOT executes the backup.

Day : Select days that the GOT executes the backup by touching displayed items.
Multiple days can be selected.

Time : Set the time that the GOT executes the backup by touching the displayed item.

POINT

Precautions for setting

When the trigger type is set to [Rise], set the trigger device with GT Designer3 or GT Designer2 in advance. Failure to do so disables the backup setting with [Rise] set.

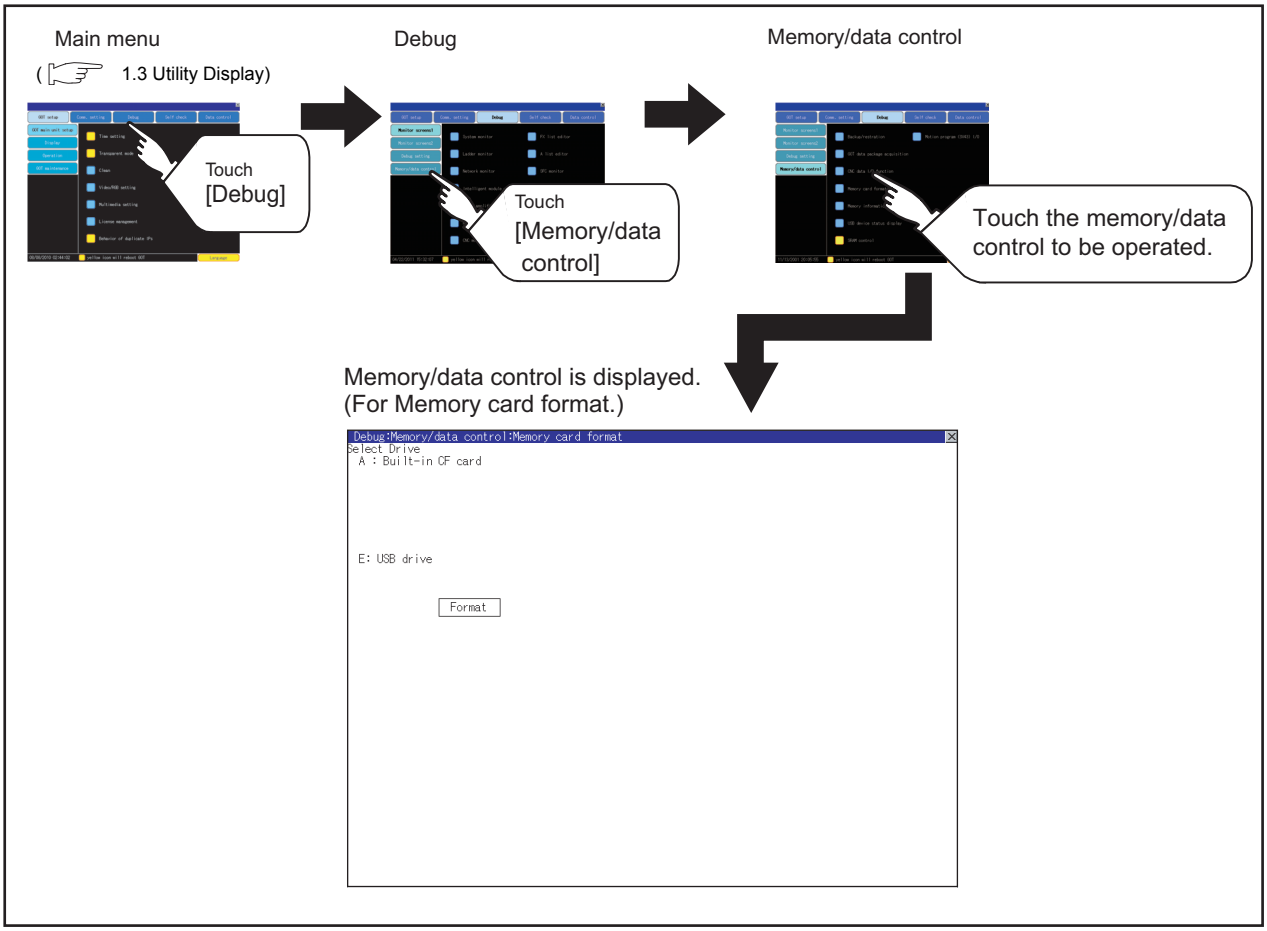
4.3 Memory/Data Control

4.3.1 Functions of memory/data control

Use the CF card or USB memory to backup/restore the OS data, special data, project data (screen data) and alarm data stored in GOT.
The format of the CF card or USB memory is also possible.
The following describes the functions available as the memory/data control.

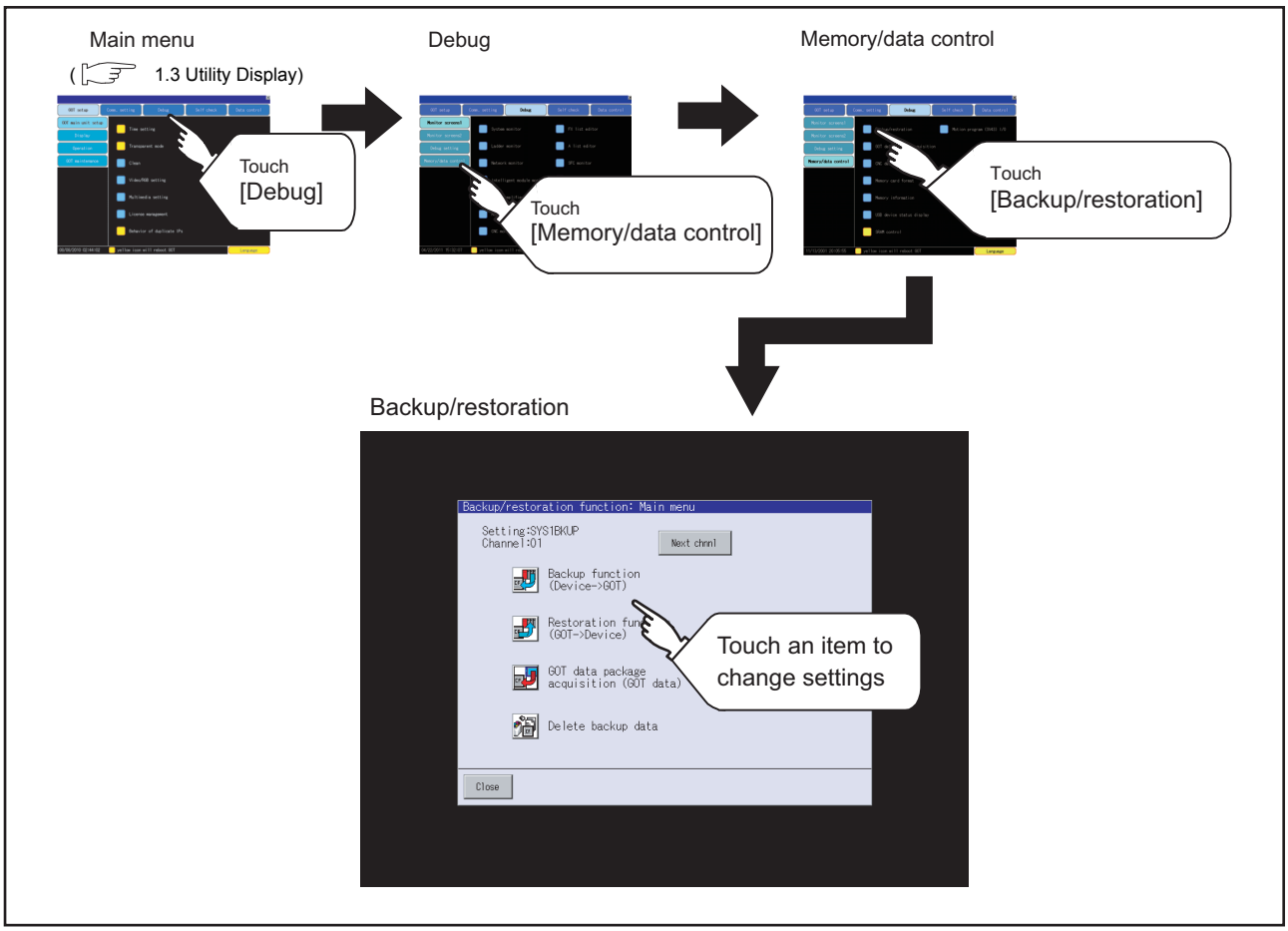
Item	Description	For GT Designer2	For GT Designer3	Reference
Backup/ restoration	Executing backups, executing restorations, and deleting backup data are possible.	○	○	4.3.2
GOT data package acquisition	Copying OS data, special data and project data stored in GOT main unit to CF card or USB memory are possible.	○	○	4.3.3
CNC data I/O function	Machining programs, parameters, and others of the CNC connected to the GOT can be copied or deleted.	○	○	4.3.4
Memory card format	Formatting CF card or USB memory is possible.	○	○	4.3.5
Memory infomation	Displaying the flash memory empty area size available for the user of each drive and Boot drive empty area size is possible. Confirming memory empty space is enabled without connecting a personal computer.	○	○	4.3.6
USB device status display	Displays the USB device installation status. Use this screen to remove the USB memory from GOT.	○	○	4.3.7
SRAM control	Data in the SRAM user area can be backed up or restored, and the SRAM user area is initialized.	×	○	4.3.8
Motion program (SV43) I/O	This function is available for a motion controller OS (SV43) special model. For details of this function, please contact our company.	×	○	4.3.9

■ Display operation of memory/data control



4.3.2 Backup/restoration

■ Display operation of backup/restoration



■ Operation of backup/restoration

Backup/restore data from the controller to GOT, or erase backup data with the backup/restoration.
GOT data package acquisition is also possible.
Refer to the following manuals for details of backup/restoration.

- GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3 (11 BACKUP/RESTORE)
- GOT1000 Series Extended/Option Functions Manual for GT Designer2/GT Works2 (11 Backup/restore)

4.3.3 GOT data package acquisition

■ GOT data package acquisition function

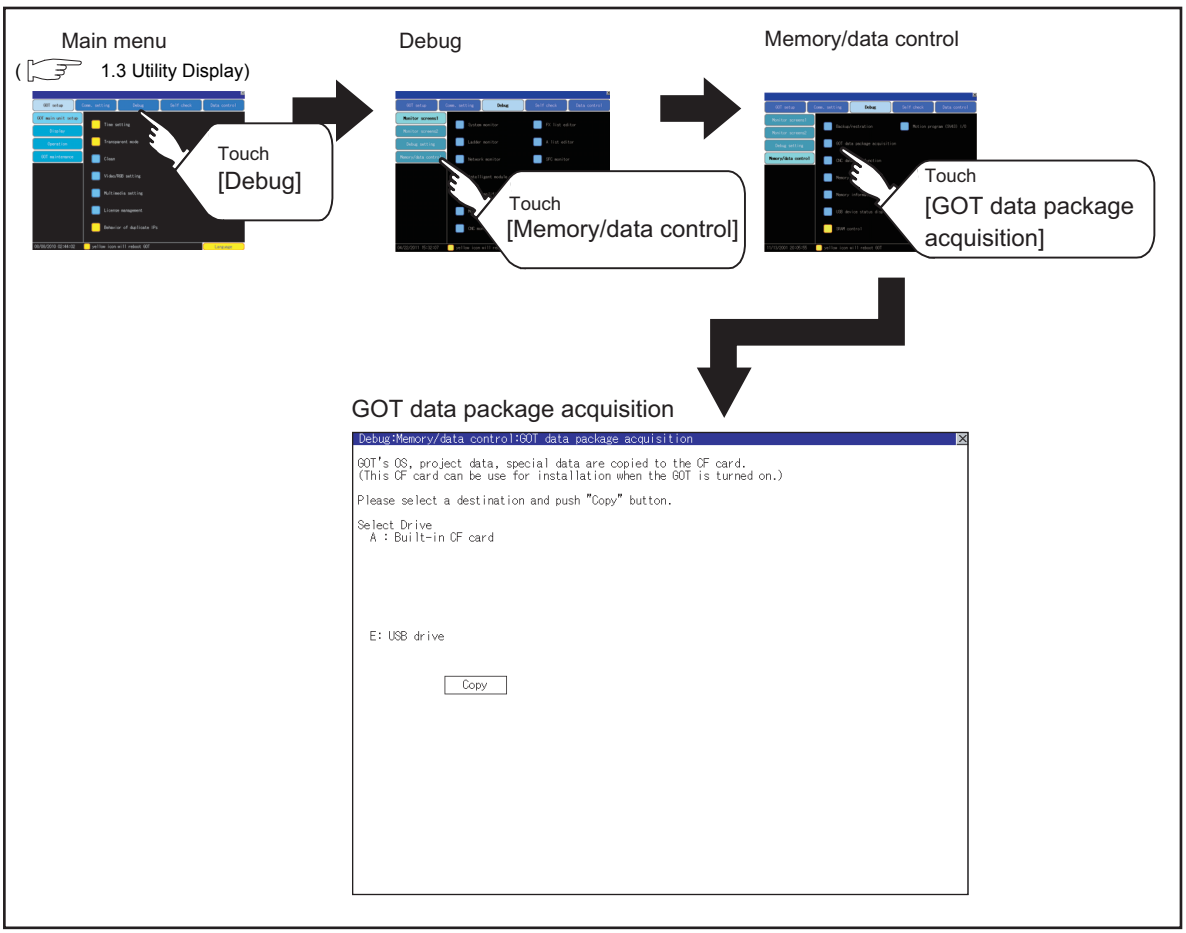
The GOT data package acquisition copies the installed OS or data in the GOT main unit to the CF card or USB memory.

- OS (Boot OS, standard monitor OS, communication driver, extended function OS, option OS)
- Special data
- Project data

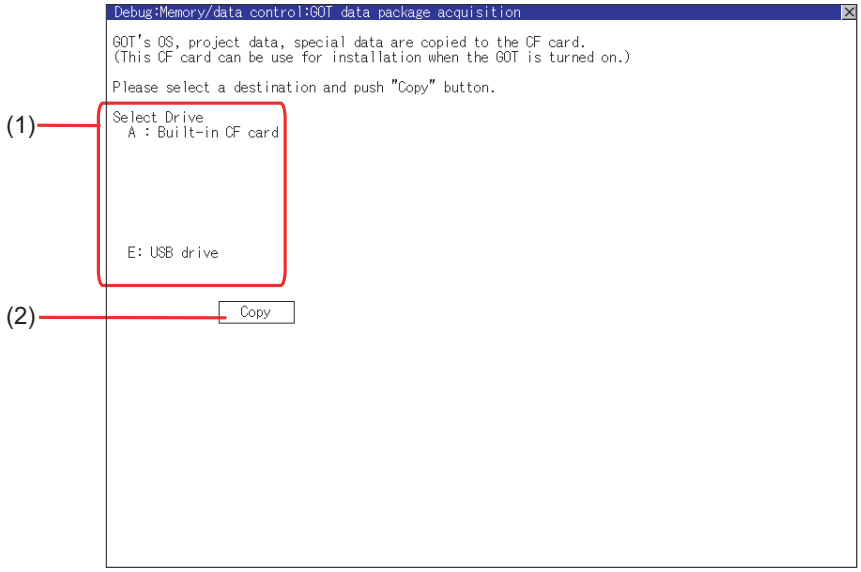
The copied data can be utilized for backup or creating the same GOT system by installing the data.
For installation function of the GOT, refer to the following.

7.3 BootOS and Standard Monitor OS Installation Using CF Card or USB Memory

■ Display operation of GOT data package acquisition



■ Display example of GOT data package acquisition

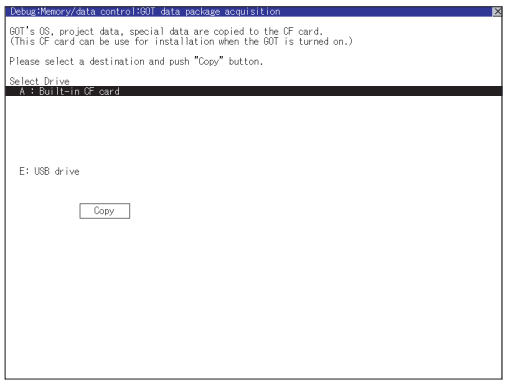


No.	Item	Description
(1)	Select Drive	Displays the drive where OS and data can be copied. When the memory card is not installed, [A: Built-in CF card] and [B: Memory card] are not displayed. [E: USB drive] is displayed even if the USB memory is not installed.
(2)	Copy	Touching the button starts copying.

■ GOT data package acquisition operation

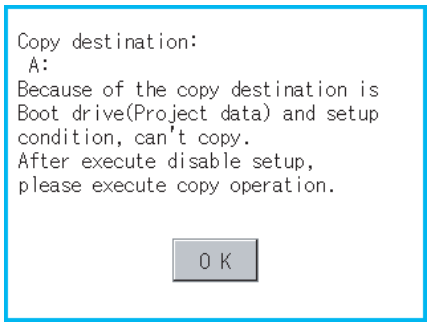
(1) Display operation of GOT data package acquisition

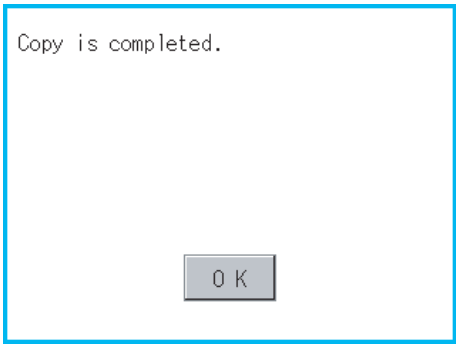
The GOT data package acquisition copies the installed OS or data in the GOT main unit to the CF card or USB memory.
(This item explains using the A drive.)



1. Touching the drive name below [Select Drive] inverts the touched drive name.
   Touching the [Copy] button starts copying.

(Example:
Dialog box after touching the [Copy] button)





2. The display depends on the status of copy destination and setup.
Operate with following the displayed dialog box.

3. After copying OS and data, the dialog box for notifying the completion appears.
Touching the [OK] button closes the dialog box.

HINT

Processing time reference

The time required for the processing depends on conditions such as OS, data capacity, and file structure.
(Reference values)

- When the capacity is 4 Mbytes: Around 6 seconds
- When the capacity is 12 Mbytes: Around 18 seconds

(2) Precautions for operation

(a) Copying project data
If the Boot source drive and copy destination drive for project data is the same, the project data cannot be copied.
If the drives are the same, cancel the setup.

(b) When project data are copied to the GOT
If OS or project data is copied to the GOT using the CF card or USB memory created with GOT data package acquisition, the utility setting is also copied.
Check each utility setting after copying to the GOT and change the setting according to need.

(c) CF card or USB memory to be used
When performing GOT data package acquisition, do not store other data to the CF card or USB memory.
If doing so, the previous data will be unavailable.

4.3.4 CNC data I/O function

Machining programs, parameters, and others of the CNC connected to the GOT can be copied or deleted.
Refer to the following manuals for details of CNC data I/O.

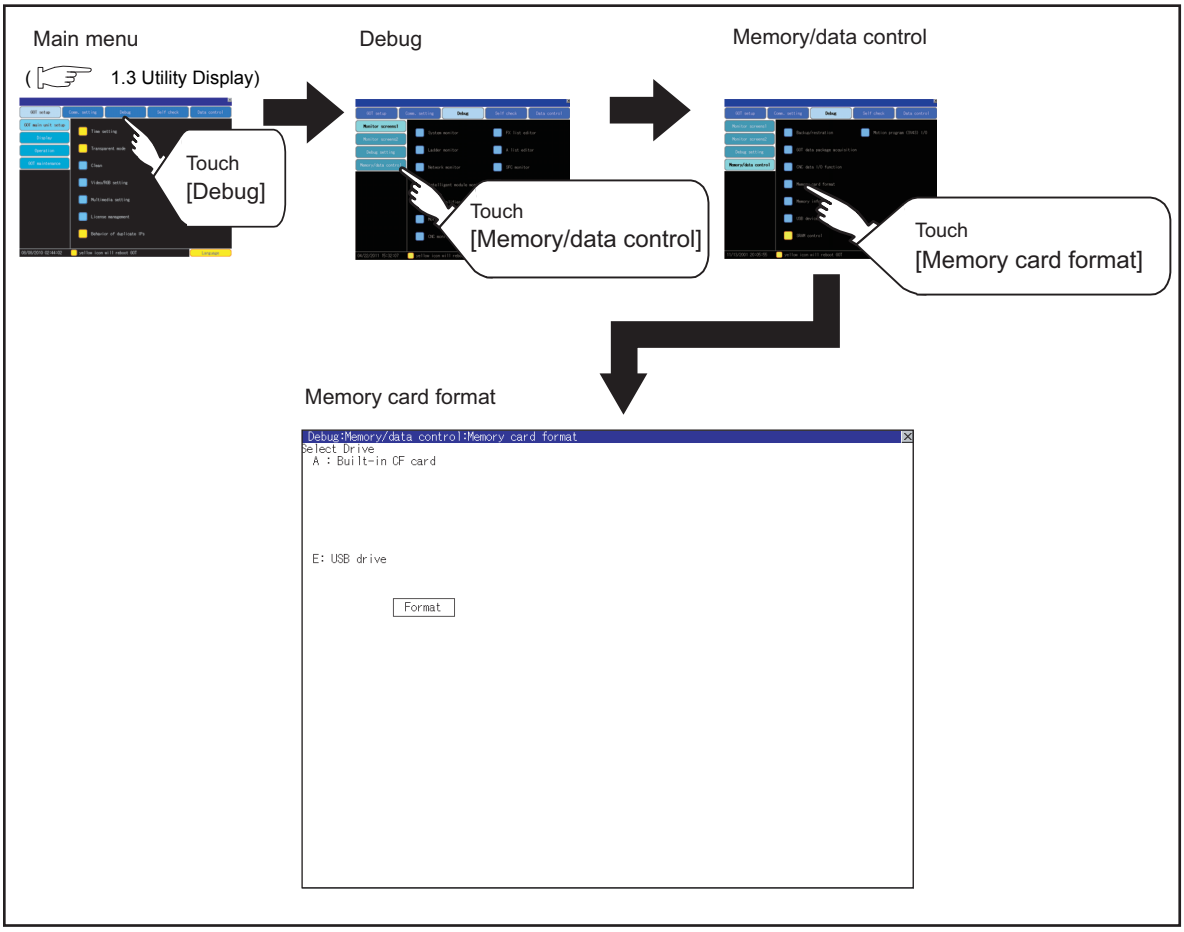
•GOT1000 Series User's Manual (Extended Functions, Option Functions) for GT Works3
•GOT1000 Series Extended/Option Functions Manual for GT Designer2/GT Works2

4.3.5 Memory card format

■ Function of the memory card format

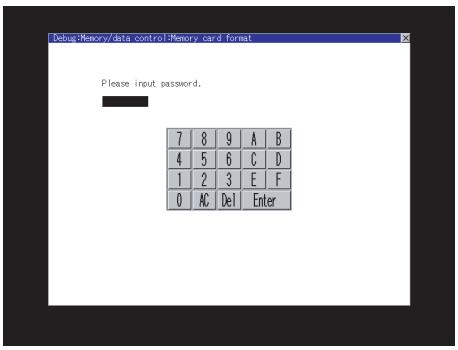
Format the CF card or USB memory.

■ Display operation of memory card format

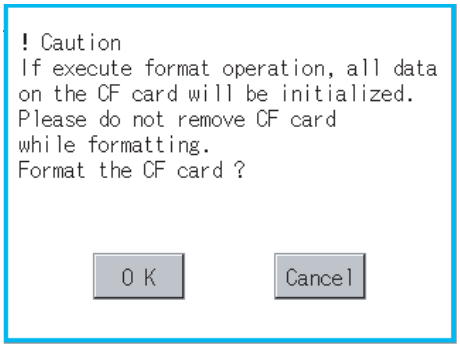


■ Operating the memory card format

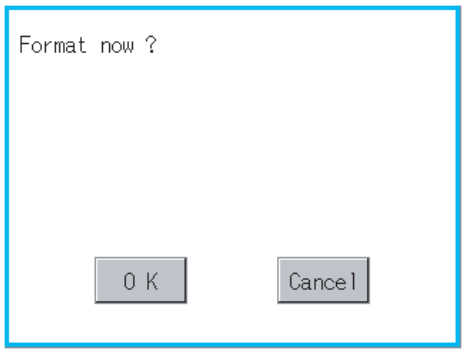
1. Install the CF card or USB memory to GOT.
   Refer to the following for inserting/removing method of CF card or USB memory.
   ☞(Hardware) 8.3.2 ■CF card
   (Hardware) 8.5.2 ■Install USB peripheral devices
2. Touch and select the drive to format by drive selection.
3. If touch [Format] button, the password input screen is displayed.



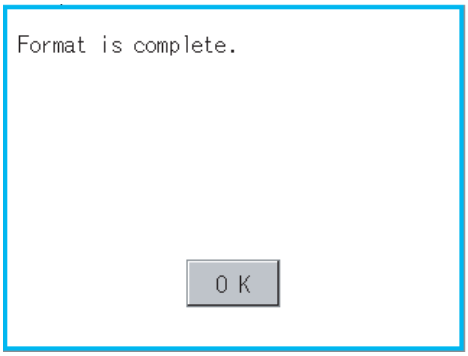
4. Type [1] [1] [1] [1] and touch the [Enter] key. The dialog box shown on the left will appear. (The password is fixed to 1111.)
   Confirm the contents of the dialog box, and touch [OK] button when execute the format of CF card or USB memory.
   When cancel the memory card format, touch [Cancel] button.



5. If touch [OK] button by step4, the dialog mentioned left is displayed for reconfirm.
6. Reconfirm whether to format the CF card or USB memory.
   Touch the [OK] button to start the format.
   Touch the [Cancel] button to cancel the format of CF card or USB memory.



7. When the formatting is completed, the completion dialog mentioned left is displayed.
8. If touch [OK] button, closes the dialog.



HINT

Restrictions on formatting

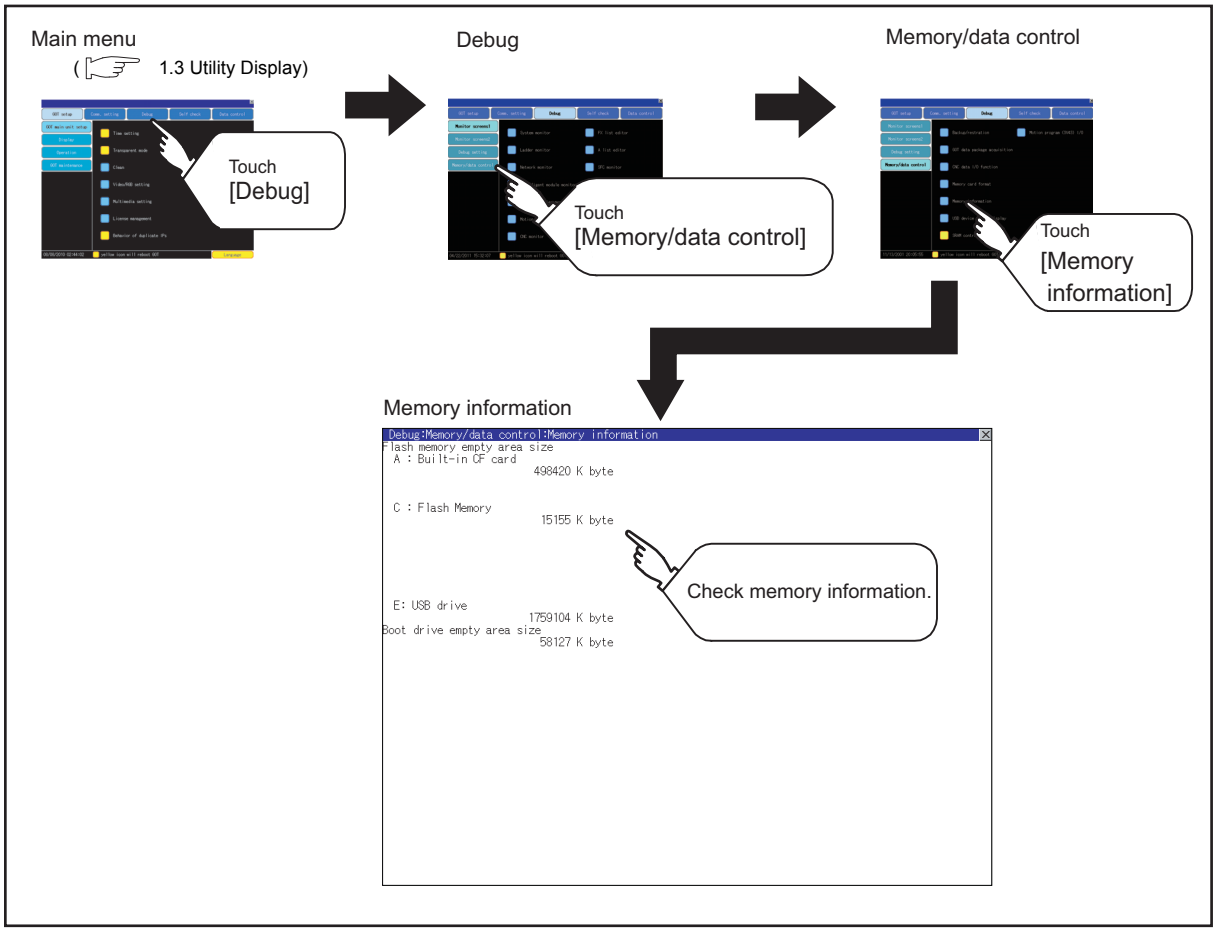
- When use an unformatted CF card or USB memory in GOT, format the CF card or USB memory by PC. GOT cannot format the unformatted CF card or USB memory.
- The formatting of GOT does not change the file system (Example: FAT16) of the CF card or USB memory and inherits the file system before formatting.

4.3.6 Memory information

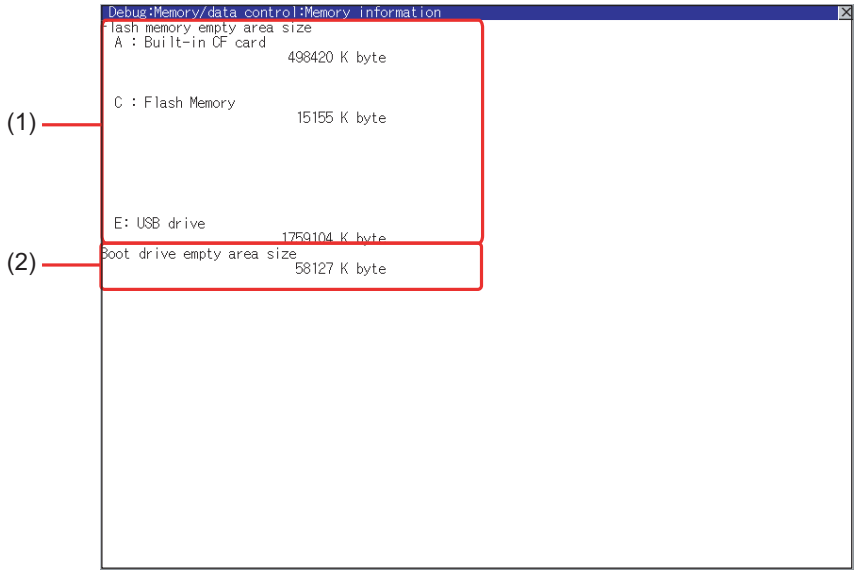
■ Memory information functions

Displays the flash memory empty area size available for the user of each drive and Boot drive empty area size.
Confirming memory empty space is enabled without connecting a personal computer.

■ Memory information display operation



■ Memory information display example



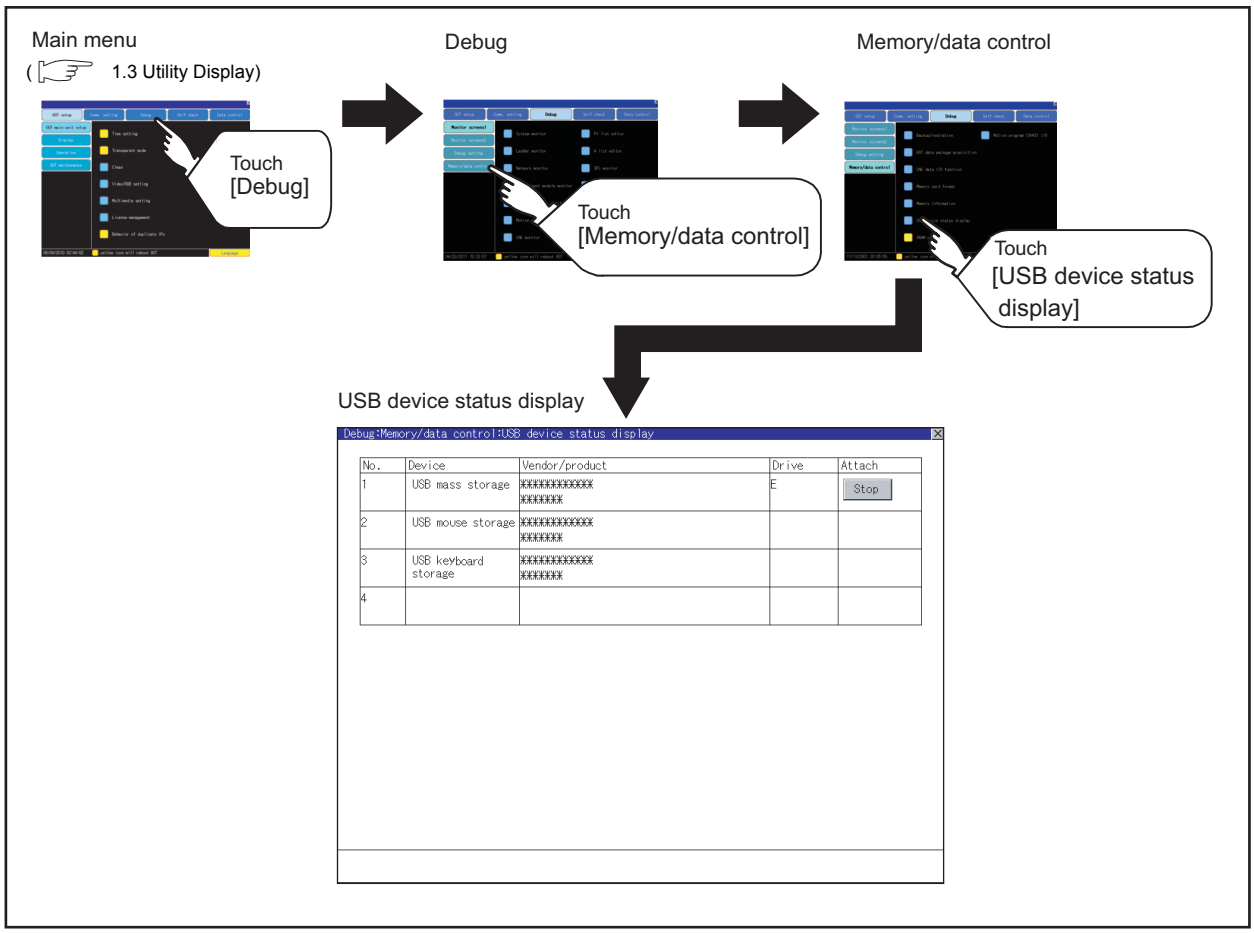
No.	Item	Description
(1)	Flash memory empty area size	Indicates the memory space of each drive available for the user to store files or folders. The [A: Standard CF Card] and [B: Memory card] are not displayed when CF card is not installed. If USB memory is not installed, [E: USB drive] is not displayed.
(2)	Boot drive empty area size	Indicates the empty area size of boot drive specified by the user.

4.3.7 USB device status display

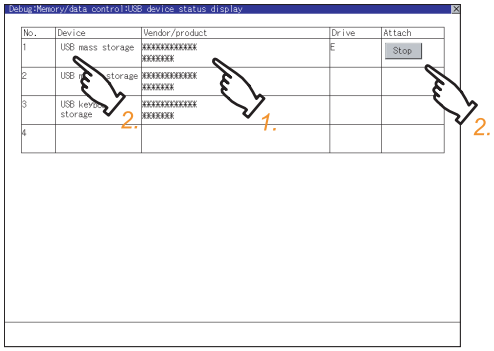
■ Function of USB device status display

This function displays a list of the USB peripheral device connection status in the GOT.
Also, this screen is used to remove the USB peripheral device from GOT.

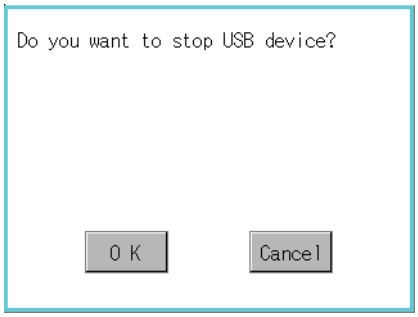
■ Display operation of USB device status display



■ USB device status display operation



1. When the USB peripheral device is installed to GOT, the screen shown left is displayed.
2. USB mass storage is displayed in Device, and [Stop] button is displayed in Attach.



3. When the [Stop] button is touched, the dialog box shown left is displayed.
   Touch the [OK] button to prepare the USB peripheral devices removal.
   Touch the [Cancel] button to cancel the preparation of USB peripheral devices removal.

4. When the preparation of removal is ready, the dialog box shown left is displayed.
5. Touch [OK] to close the dialog box.

POINT

USB mouse/keyboard recognition

When using the USB mouse/keyboard, install [USB mouse/keyboard] of the extended function OS to the GOT.

4.3.8 SRAM control

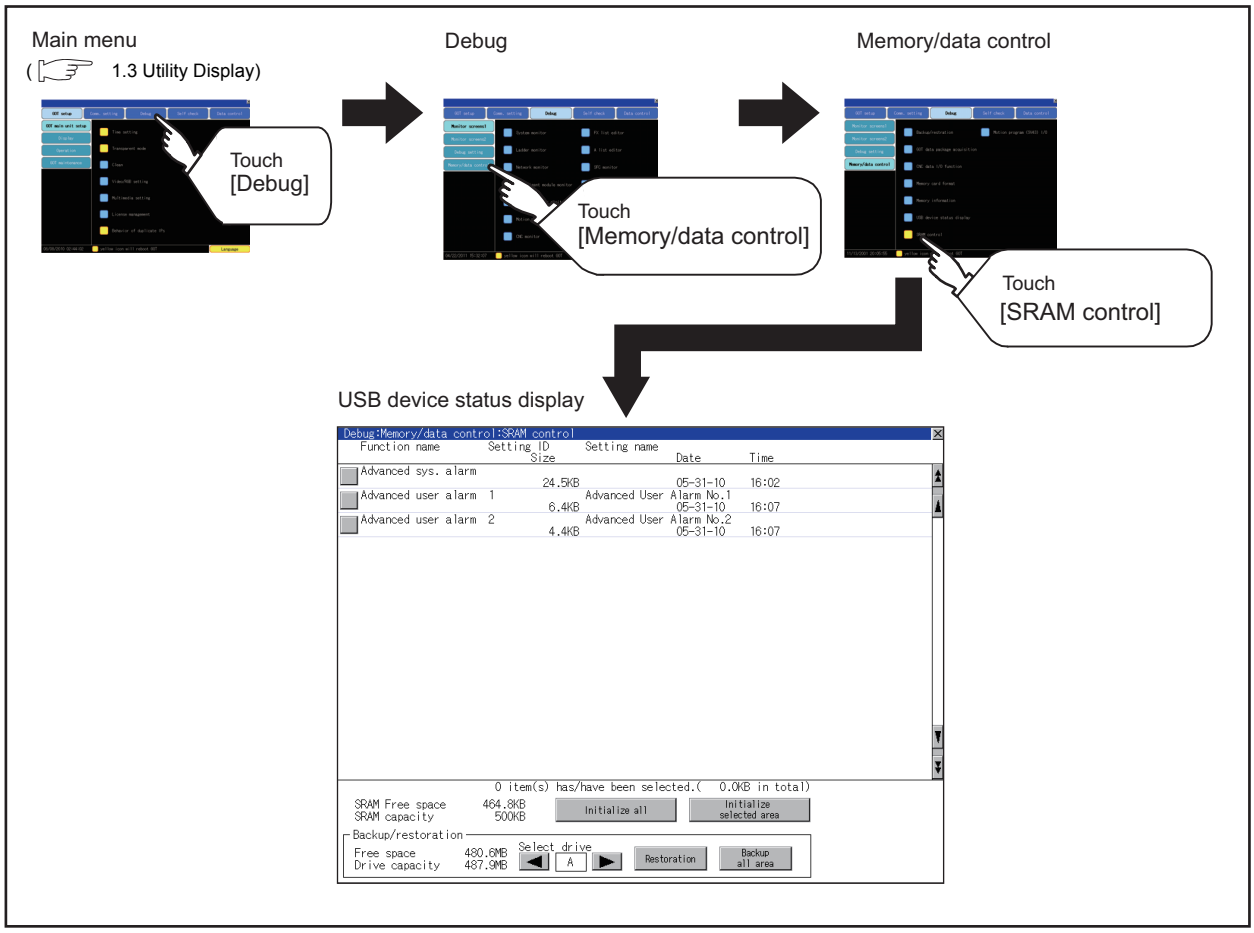
■ Function of SRAM control

The SRAM user area usage can be confirmed, data in the SRAM user area can be backed up or restored, and the SRAM user area is initialiized.

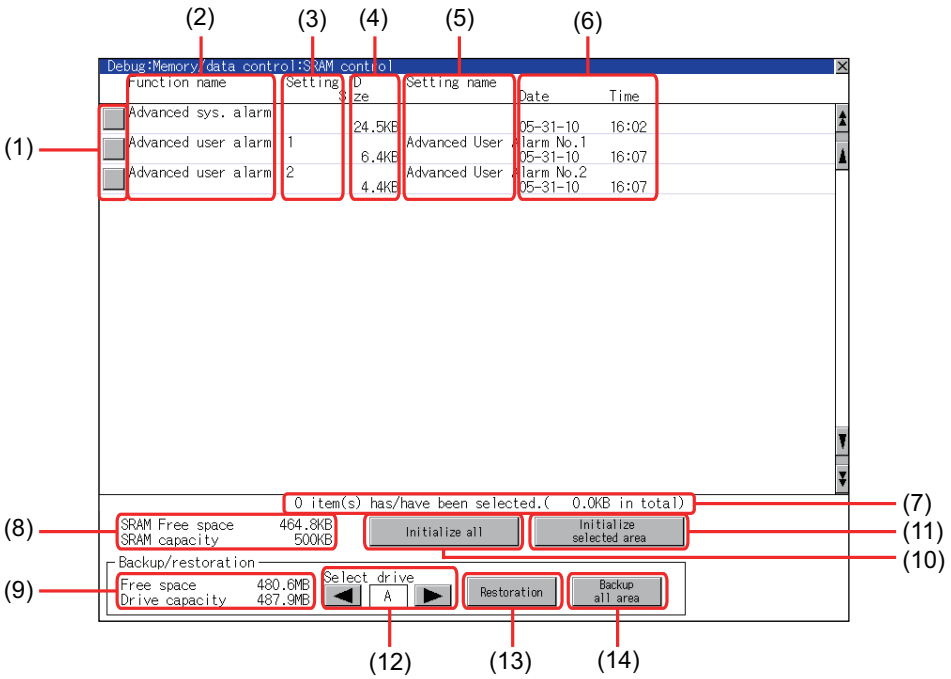
For the available functions in the SRAM user area, refer to the following.

☞ GT Designer3 Version1 Screen Design Manual (Functions)

■ Display operation of SRAM control



■ Display example of SRAM control



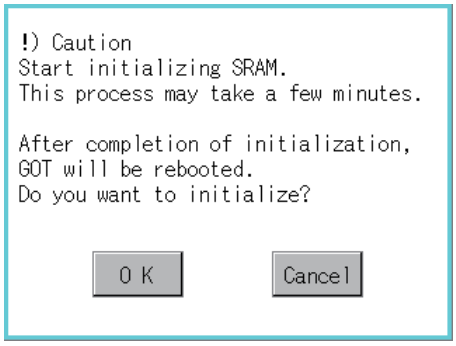
No.	Item	Description
(1)	Check box	Touch the check box to select or clear the item.
(2)	Function name	Displays the used functions in the order of the advanced system alarm, advanced user alarm, and logging function.
(3)	Setting ID	Displays the setting IDs. The setting IDs of the advanced system alarm are not displayed.
(4)	Size	Displays the data size.
(5)	Setting name	Displays the setting name. For the setting name, only characters within the display range are displayed.
(6)	Date, Time	Displays the creation date and time of each data.
(7)	n item(s) has/have been selected.	Displays the information of the items currently selected.
(8)	SRAM Free space	Displays the current free space size or total space size of the SRAM user area.
(9)	Free space	Displays the current free space size or total space size of the drive selected for [Select drive].
(10)	Initialize all	Initializes all areas of the SRAM user area.
(11)	Initialize selected area	Select each area of the SRAM user area to initialize multiple areas of the SRAM user area.
(12)	Select drive	Switches drives to be used for the data backup or restoration in the SRAM user area. The following drives can be switched only when a CF card or USB memory is installed. • CF card: A (standard CF card), B (extended memory card) • USB memory: E (USB drive)
(13)	Restoration	Saves data in the selected drive to the SRAM user area.
(14)	Backup all area	Saves data in the SRAM user area to the selected drive.

■ SRAM control operation

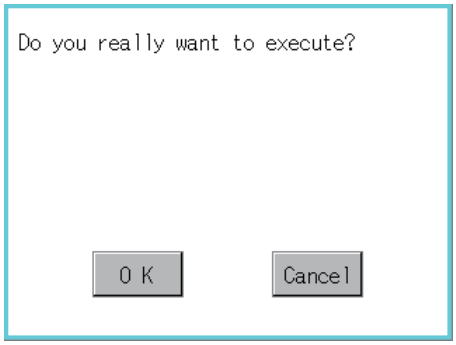
(1) Operation to initialize all or selected areas of the SRAM user area

1. Perform any of the following operations.
   - To initialize all areas of the SRAM user area, touch the [Initialize all] button.
   - To initialize selected areas of the SRAM user area, select the check box of the area to be initialized, and then touch the [Initialize selected area] button.

(Example:
Dialog box if the [Initialize all] button is touched.)



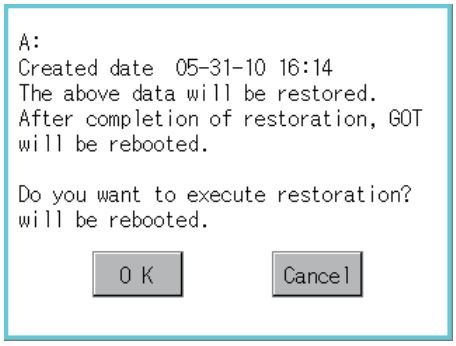
2. The dialog box shown left appears.
   Check the description of the dialog box. To initialize the SRAM user area, touch the [OK] button.
   To cancel the initialization, touch the [Cancel] button.

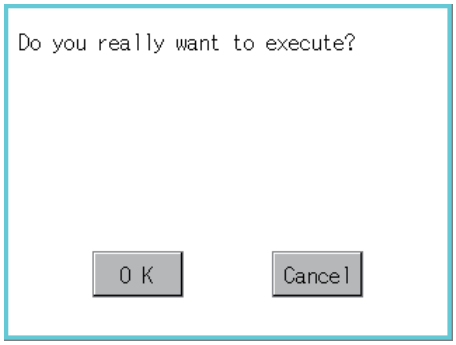


3. When touching the [OK] button in step2, the dialog box shown left appears for recheck.
   To start the initialization, touch the [OK] button.
   To cancel the initialization, touch the [Cancel] button.

4. The completion dialog box appears when the initialization is completed.
   To close the dialog box and restart the GOT, touch the [OK] button.

(2) Operation to restore data





1. To restore data in the SRAM user area to a drive
   Select the drive where the data is stored, and then touch the [Restoration] button.

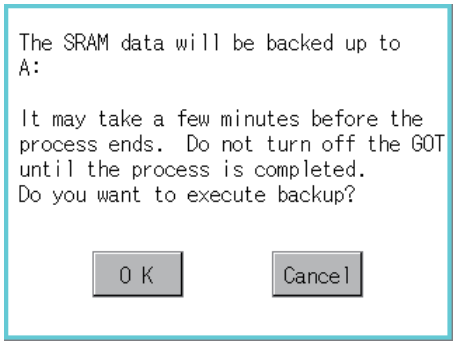
2. The dialog box shown left appears.
   Check the description of the dialog box. To restore all data in the SRAM user area, touch the [OK] button.
   To cancel the restoration, touch the [Cancel] button.

3. When touching the [OK] button in step2, the dialog box shown left appears for recheck.
   To start the restoration, touch the [OK] button.
   To cancel the restoration, touch the [Cancel] button.

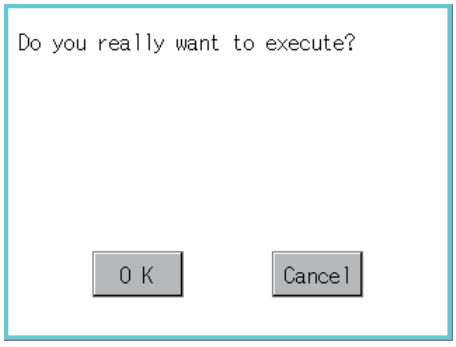
4. The completion dialog box appears when the restoration is completed.
   To close the dialog box and restart the GOT, touch the [OK] button.

(3) Operation to back up all data in the SRAM user area

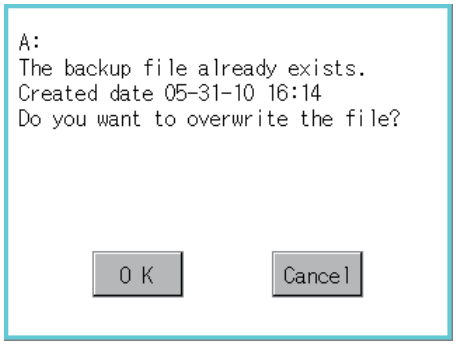
1. To back up data in the SRAM user area to a drive
   Select the drive where the data is stored, and then touch the [Backup all area] button.



2. The dialog box shown left appears.
   Check the description of the dialog box. To back up all data in the SRAM user area, touch the [OK] button.
   To cancel the backup, touch the [Cancel] button.



3. When touching the [OK] button in step2, the dialog box shown left appears for recheck.
   To start the backup, touch the [OK] button.
   To cancel the backup, touch the [Cancel] button.



4. When the file, whose name is the same, exists in the destination folder, the dialog box shown left appears without starting the backup.
   To overwrite the file, touch the [OK] button.
   To cancel the backup, touch the [Cancel] button.

5. The completion dialog box appears when the backup is completed.
   To close the dialog box, touch the [OK] button.

4.3.9 Motion program (SV43) I/O

This function is available for a motion controller OS (SV43) special model.
For details of this function, please contact our company.

5. SELF CHECK

The GOT can display the screen for self-checking.
The following describes the functions available as the self checking function.

Item	Description	For GT Designer2	For GT Designer3	Reference
Diagnostic functions	System alarm, Memory check, Drawing check, Font check, Touch panel check, I/O check, Network unit status display, Ethernet status check	△	○	5.1
Batch self check	Various start up information, System status, Communication setting contents, Operation history, Screen switching history, Clock change history, System alarm history, CPU error history	○	○	5.2

5.1 Diagnostic Functions

The following functions can be used in diagnostic functions.

Item	Description	For GT Designer2	For GT Designer3	Reference
System alarm	Displays error code and error message when error occurs.	○	○	5.1.2
Memory check	Carries out write/read check of the CF card or USB memory and built-in flash memory. Password: [5] [9] [2] [0]	○	○	5.1.3
Drawing Check	Carries out missing bit check, color check and drawing check.	○	○	5.1.4
Font check	Displays the character data on the screen to check visually.	○	○	5.1.5
Touch panel Check	Checks whether there are no dead zone area in the Touch key minimum unit (16 dots x 16 dots).	○	○	5.1.6
I/O check	Carries out RS-232 connecting target confirmation and self-loopback check.	○	○	5.1.7
Network status display	Displays the LED status, error information, etc. of the installed MELSECNET/H communication unit, CC-Link IE Controller Network communication unit (GT15-J71GP23-SX), CC-Link IE Field Network communication unit (GT15-J71GF13-T2) or CC-Link communication unit (GT15-J61BT13).	△	○	5.1.8
Ethernet status check	Sends a ping to check the Ethernet connection status.	×	○	5.1.9

5.1.1 Self check function

Carries out self-check of screen data, hardware or memory etc.

5.1.2 System alarm

■ System alarm function

System alarm is the function to display error code and error message when an error occurs in GOT, controller or network.

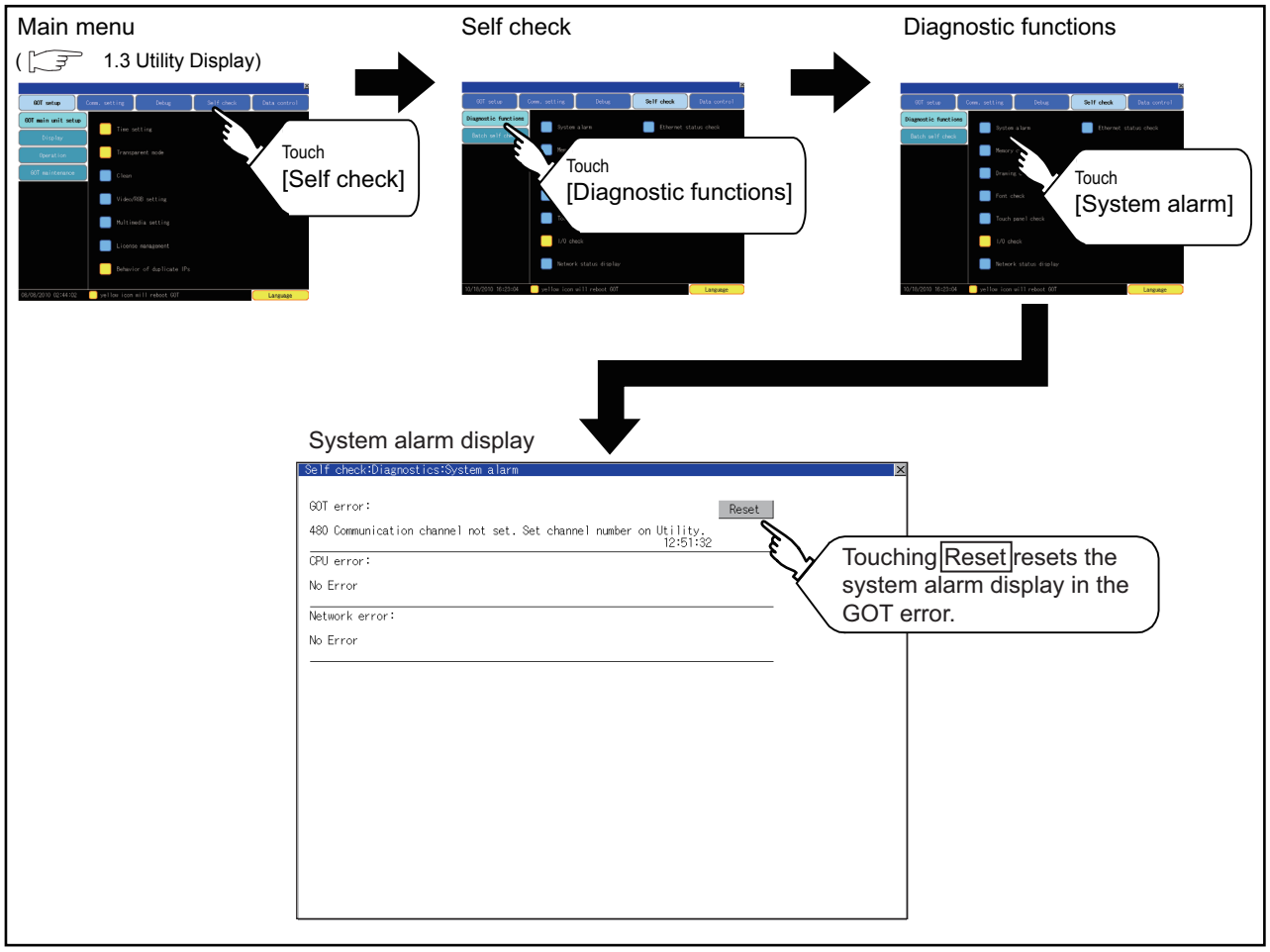
System alarms can be reset on the System alarm display screen.

For details of system alarm, refer to the following manual.

☞ •GT Designer3 Version1 Screen Design Manual (Functions) (11. ALARM)

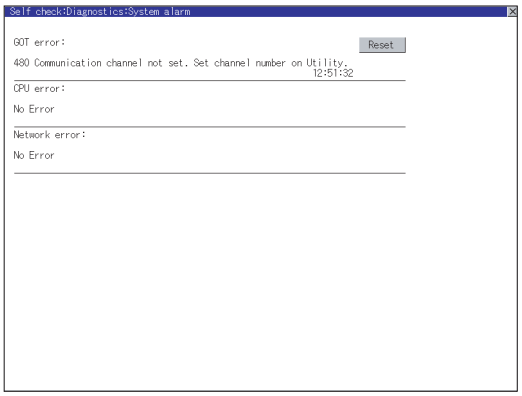
•GT Designer2 Version□ Screen Design Manual (8. ALARM)

■ Display operation of system alarm

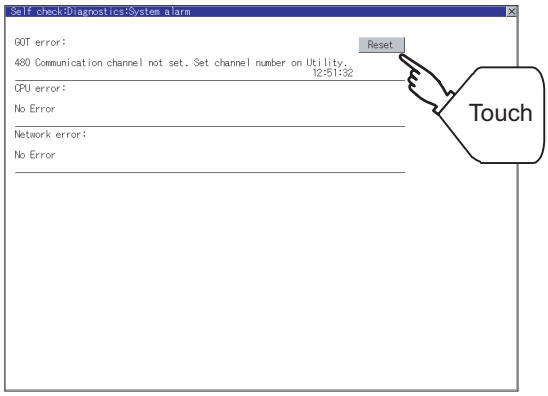


■ Operation of system alarm display

(1) System alarm display resetting



1. Eliminate each cause of the system alarm being occurred.
   Error causes can be identified by the error code, error message and channel No. displayed on the System alarm screen.
   ((Hardware) 10. TROUBLESHOOTING)



2. A method for resetting system alarm depends on an error.
   - GOT error

     Touch the [Reset] button to reset system alarms.
   - CPU error and Network error
     The system alarm is automatically reset after its cause is eliminated.

POINT

(1) Before resetting the system alarm display in the GOT error

Eliminate the system alarm cause before resetting the system alarm display in the GOT error.
If not eliminated, the system alarm display in the GOT error will not be reset even after the reset operation.

(2) Processings with reset operation

The following data in the system information are also reset.

- GOT error code (Write device)
- GOT error detection signal (System Signal 2-1.b13)

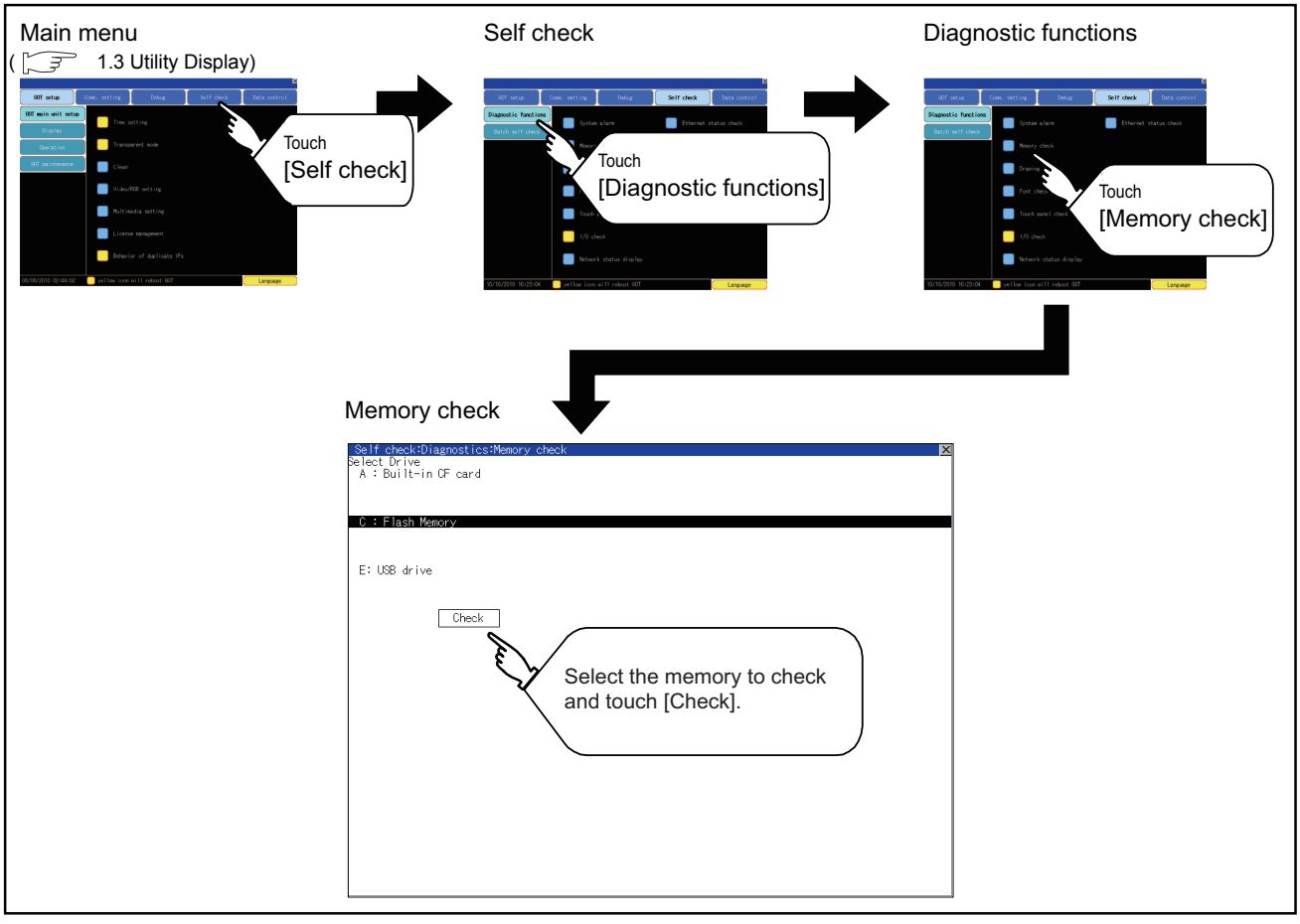
5.1.3 Memory check

■ Memory check function

Memory check function carries out the write/read check of A drive (Standard CF Card), B drive (Extended memory card), C drive (Built-in flash memory) and E drive (USB drive).

Function	Description	For GT Designer2	For GT Designer3
A drive memory check	Checks whether the memory (CF card) of the A drive can be read/written normally.	○	○
B drive memory check	Checks whether the memory (Extended memory card) of the B drive can be read/written normally.	○	○
C drive memory check	Checks whether the memory (Built-in flash memory) of the C drive can be read/written normally.	○	○
E drive memory check	Checks whether the memory (USB drive) of the E drive can be read/written normally.	○	○

■ Display operation of memory check



■ Memory check operation

Carries out write/read check of memory.

POINT

When drive is not displayed

When the drive (memory) to check is not displayed, confirm the mounting procedure or memory type with reference to the following.

☞ (Hardware) 8.3.2 ■ CF Card

(Hardware) 8.5.2 ■ Install USB peripheral devices

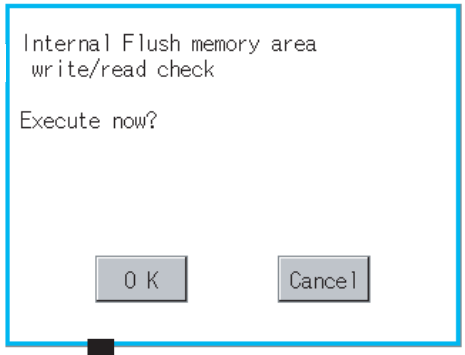
4.3.7 USB device status display

When no faults are found in mounting, etc, a memory failure may be arosen.
Replace the CF card or USB memory or built-in flash memory (C drive).
For details of built-in flash memory, contact your local Mitsubishi (Electric System) Service.

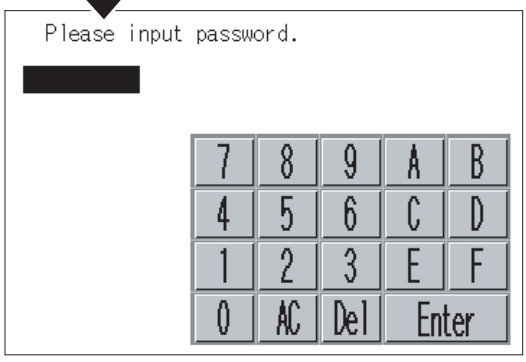
The following example explains about Memory Check using built-in flash memory (C drive).
For the Built-in CF card (A drive) memory check or Extended memory card (B drive) memory check, install the CF card before carrying out the same key operations as built-in flash memory. For the USB drive (E drive) memory check, install the USB memory before carrying out the check operations.

1. Select [Flash Memory] in the Memory check setting screen.
   If select [OK] button, the numeric keyboard window is displayed.

   If select [Cancel] button, returns to the initial menu.



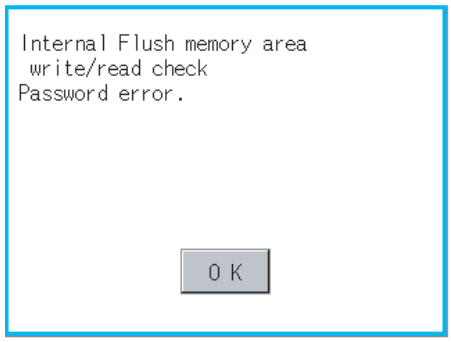
2. Touch to input password ([5] [9] [2] [0]) and touch [Enter] key.
   If touch [Enter] key,executes read/write check for the built-in flash memory, which is completed in around 10 seconds.

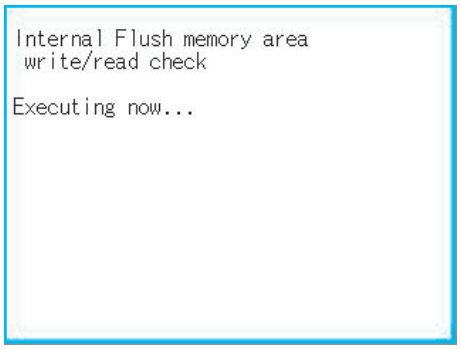


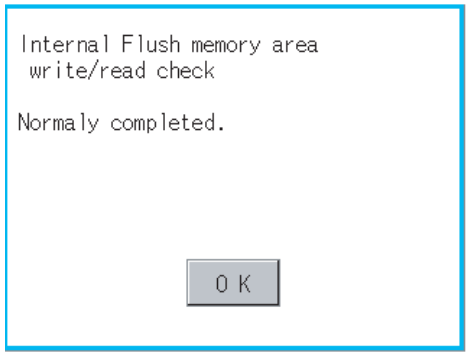
HINT

Password change

The password cannot be changed.
When input password error, the cancel dialog box is displayed.
If touch [OK], returns to the Memory check screen.



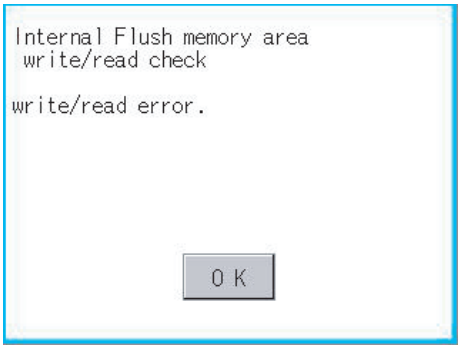




POINT

When error is found in memory

When error is found by memory check, the dialog box indicating the area in which the error occurred is displayed.
In case of error, contact your local Mitsubishi (Electric System) Service.
If touch [OK], returns to the Memory check screen.

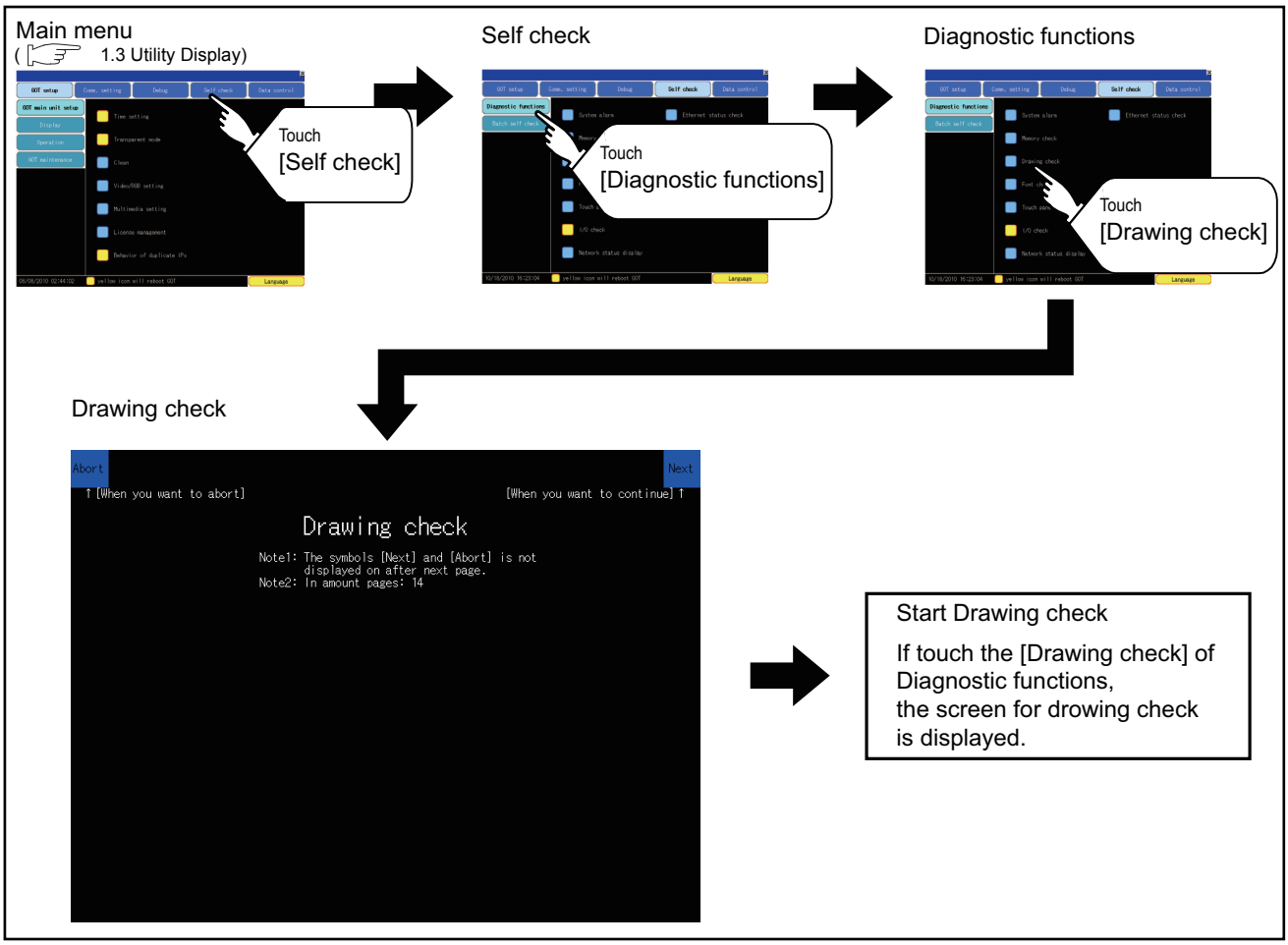


5.1.4 Drawing check

■ Drawing check function

The drawing check function carries out display checks as missing bit check, color check, basic figure display check, move check among screens.

■ Display operation of drawing check



POINT

Notes on drawing check

Missing bits is occurred in the following cases.

1. There are parts drawn in different color with the filled color.
2. There are parts of basic figure and drawing patterns which are not drawn according to the layout and procedures described in "5.1.4 ■Display operation of drawing check".

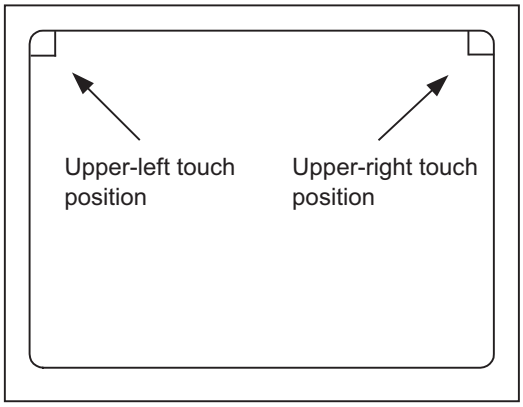
When missing bits occurs, contact your local Mitsubishi (Electric System) Service.

■ Drawing check operation

The screen for drawing check can be displayed by touching [Drawing check] on the Display check menu.

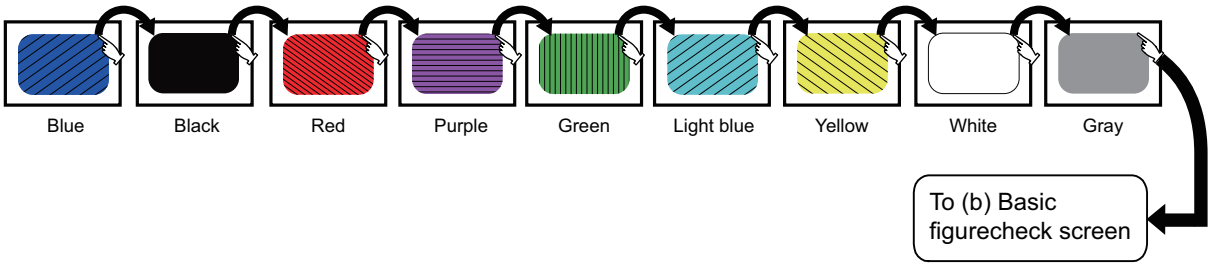
(1) Before execute drawing check

Touching the upper right part of the screen proceeds to the next check in each step during drawing check.
Touching the upper left part of the screen returns to the [Display check] screen.



(a) Missing bit, Color Check

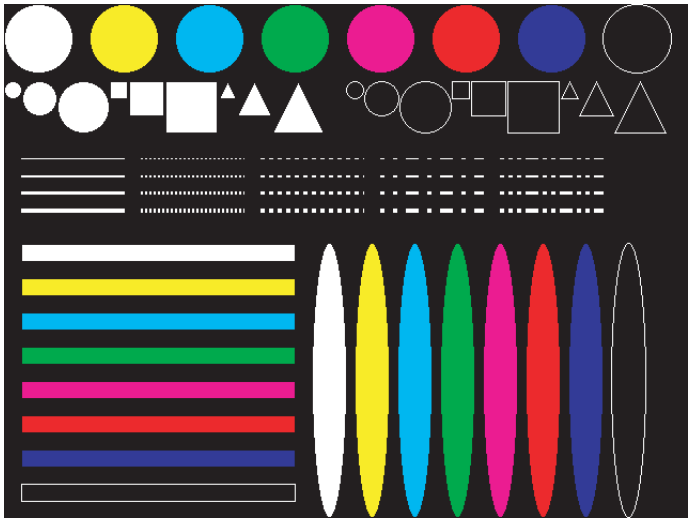
Each touch of the upper-right part of the screen, the entire screen color changes in the following order: blue, black, red, purple, green, light blue, yellow, white, and gray.
Check missing bit and color visually.



If touch the upper right part of the screen at the final color (white screen), the following 2) Basic figure check screen is displayed.

(b) Basic figure check

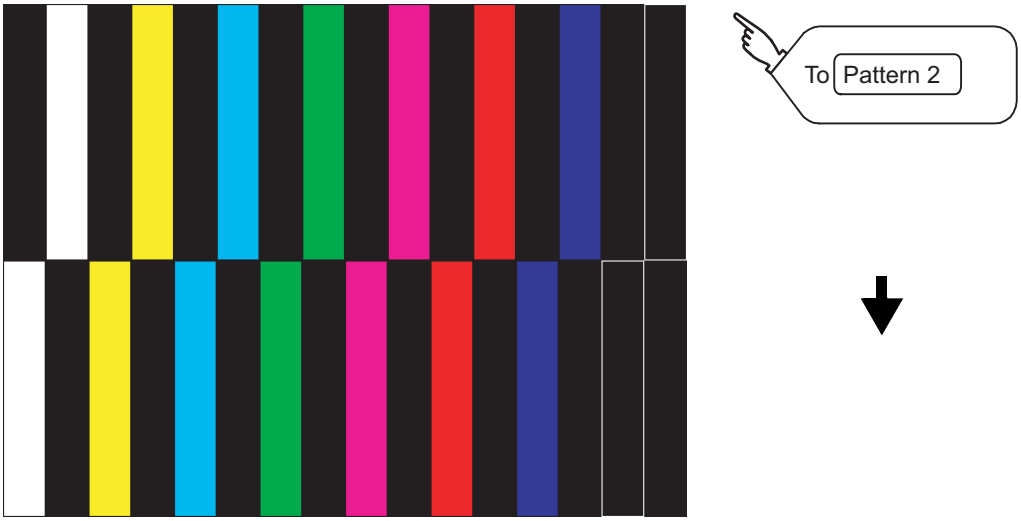
Check whether there is no shape transformation of basic figure or display losses.
The basic figure drawn has 4 types: 1. Filled circle, 2. Line, 3. Rectangle, 4. Ellipse.



To Pattern 1 of (c) Move check among screen

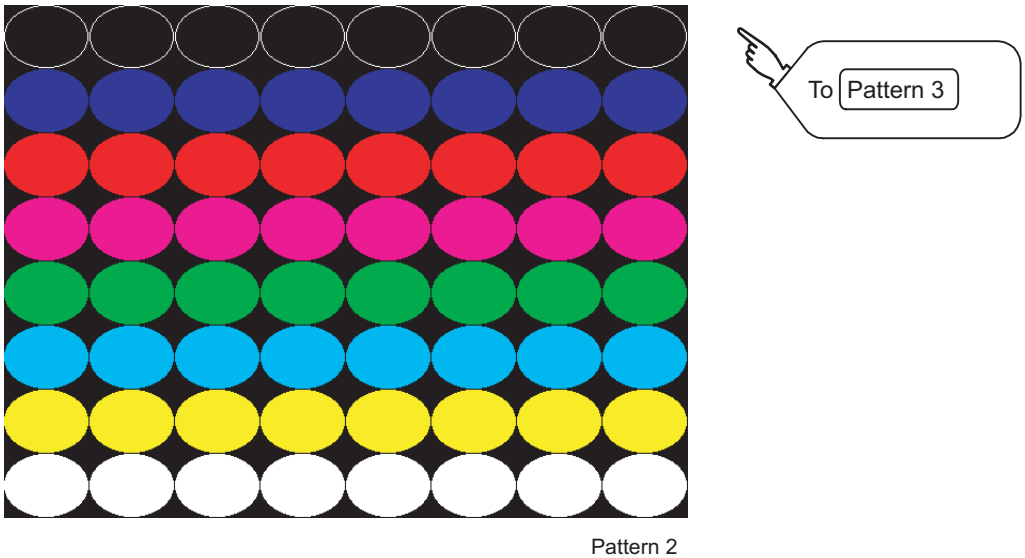
(c) Move check among screens

- Pattern 1: Shape transformation, color check
  The drawn figures are displayed in order and at regular intervals.
  If the shape and color are displayed visually in order, it is normal.



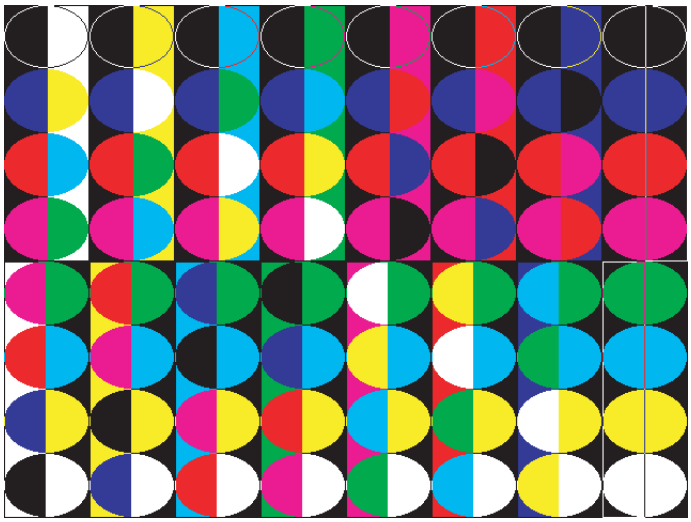
Pattern 1

- Pattern 2: Shape transformation, color check
  The drawn figures are displayed in order and at regular intervals.
  If the shape and color are displayed visually in order, it is normal.

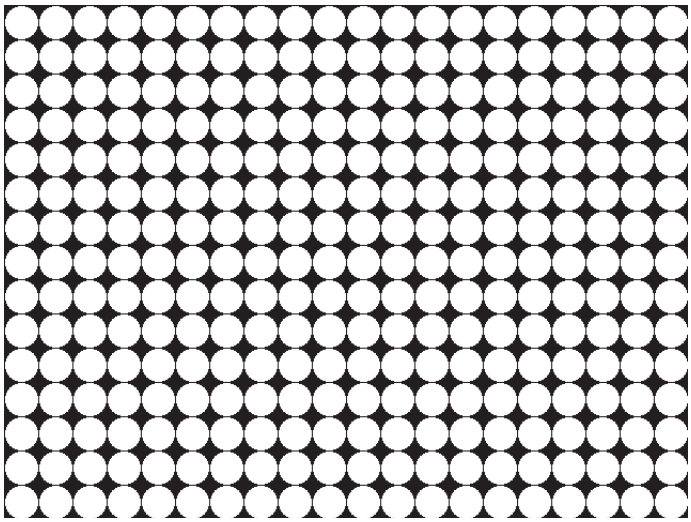


Pattern 2

- Pattern 3: Shape transformation, color check
  The overlaped shapes of pattern 1 and pattern 2 are displayed.
  If the shape and color are displayed visually in order, it is normal.



- Pattern 4: Shape Check
  The drawn figures are displayed in order and at regular intervals.
  If the shape and color are displayed visually in order, it is normal.
  If touch the upper right part of the screen, returns to [Display check] screen.



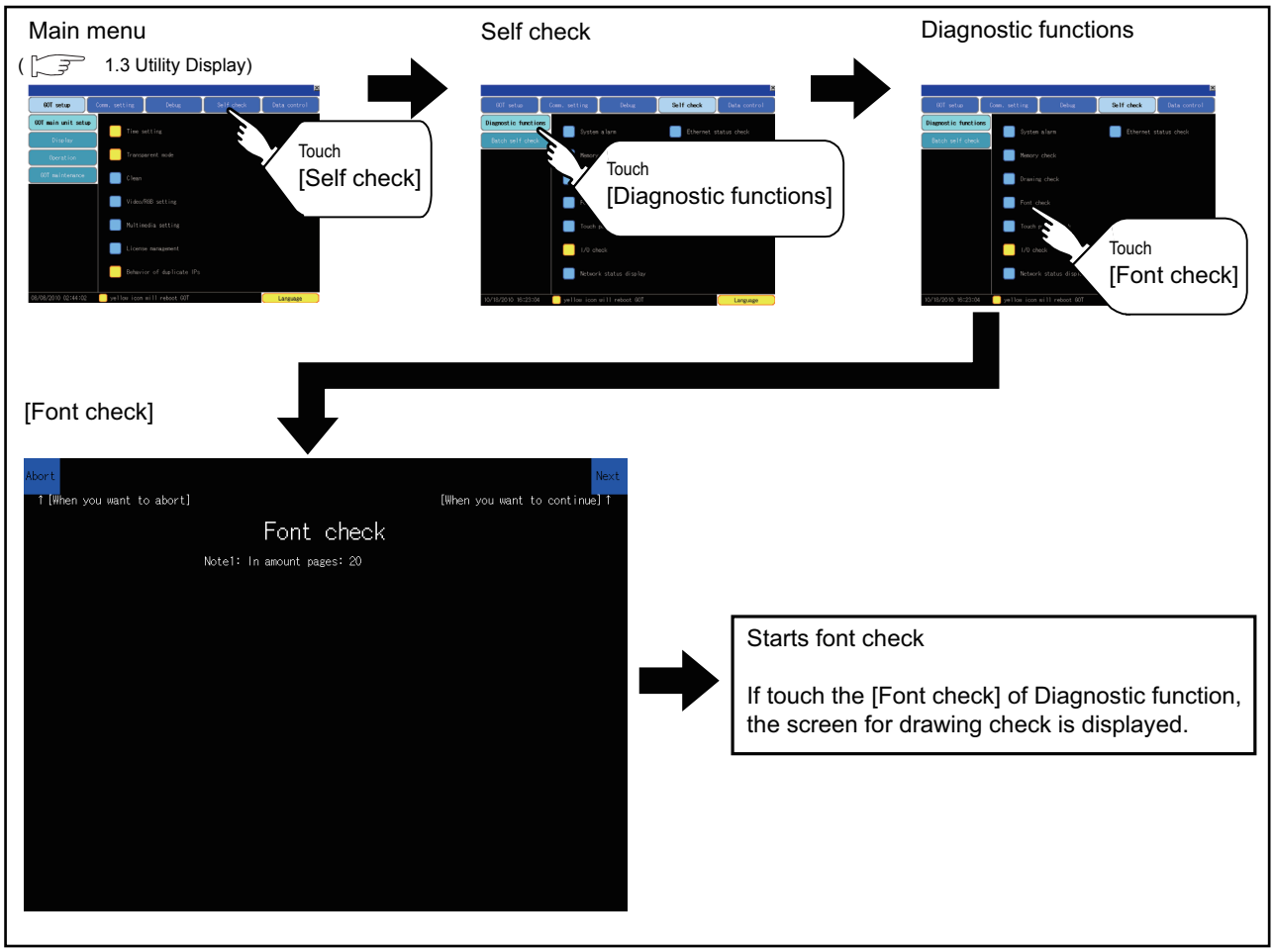
The main screen image after the screen information read and write is executed

5.1.5 Font check

■ Font check function

The font check is a function which confirms fonts installed in GOT. The character data of the font is displayed on the upper left part of the screen one by one.

■ Display operation of Font check



POINT

Notes on Font Check

Judged as normal if the following characters are correctly displayed. (UNICODE)

Alphabetic characters etc.	: 0 x 0000 to 0 x 04F9 (From basic Latin to Kirill)
Hangul characters	: 0 x AC00 to 0 x D7A3 (Hangul / Hangul auxiliary)
Kanji	: 0 x 4E00 to 0 x 9FA5 (CJK integrated Kanjis)

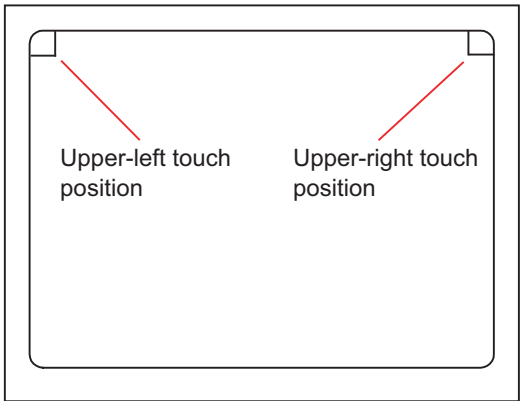
If the characters above are not displayed correctly, the fonts may not be installed. Install the standard monitor OS again.

■ Font check operation

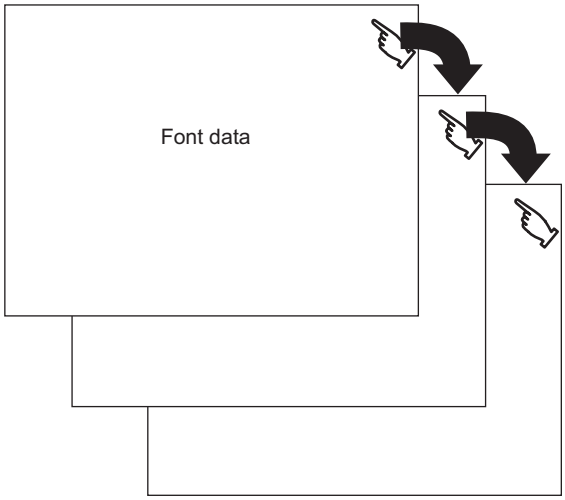
Font check starts by touching [Font Check] in the [Display check] screen.
The character data of the built-in font (in the built-in flash memory) can be checked visually to confirm the font drawings by displaying the character data serially on the screen.

(1) Before execute font check

Touching the upper right part of the screen proceeds to the next check in each step during Font check.
Touching the upper left part of the screen returns to the [Display check] screen.



The installed font data is displayed by touching the upper right part of the screen.



POINT

Option fonts

To display optional fonts, the followings are required.

- The option font installation

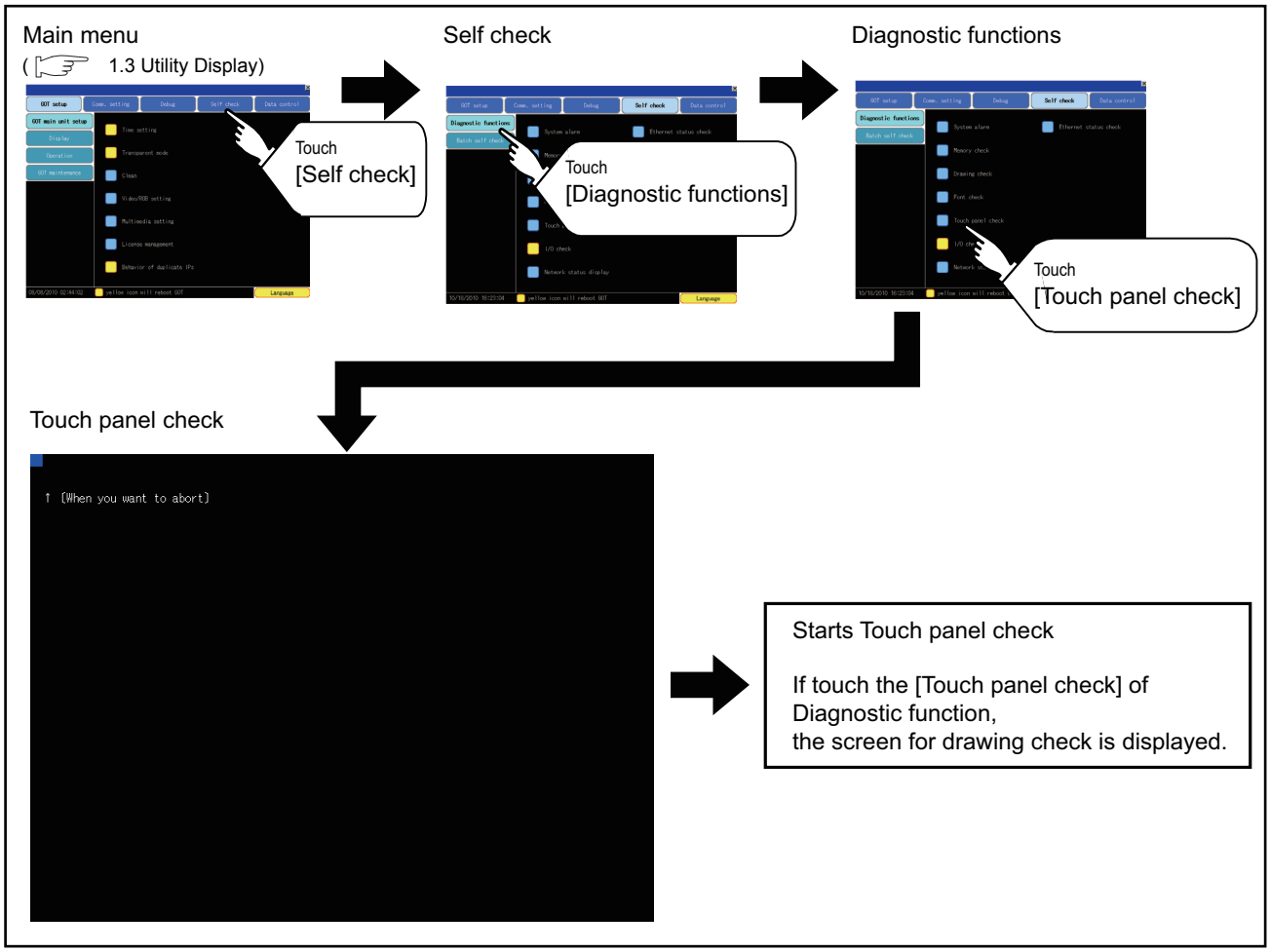
The option fonts are displayed at the end.

5.1.6 Touch panel check

■ Touch panel check function

Touch panel check is a function which checks whether there is no dead zone area in touch key minimum unit (16 dots x 16 dots).

■ Display operation of Touch panel check



POINT

Notes on Touch panel check

If the touched part is not filled with yellow color, there are the following two possible causes.

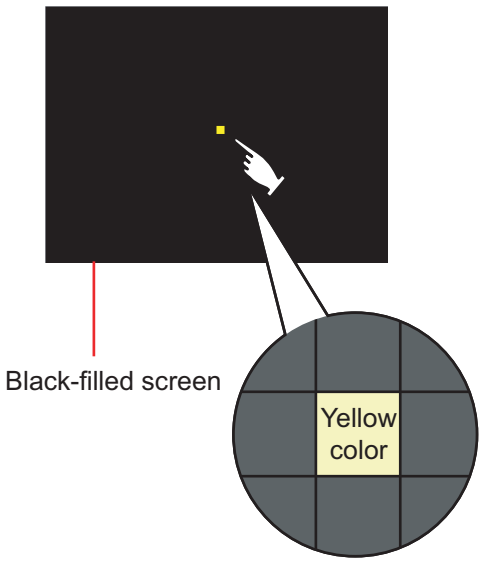
1. Display part failure
2. Touch panel failure

In that case, contact your local Mitsubishi (Electric System) Service.

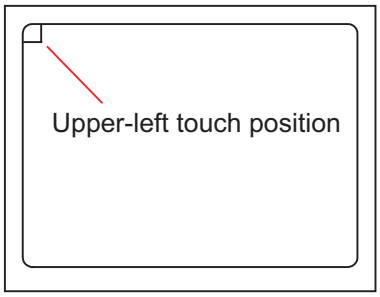
■ Touch panel check operations

If touch [Touch panel check] of self-check, a black-filled screen is displayed over the entire screen area.

1. Touch a part of the screen.
   The touched part becomes a yellow-filled display.



2. If touch the upper left part, returns to the self-check.



HINT

Checking the upper left part of the screen

Only the upper left part of the screen cannot be filled with yellow.
If returnes to the self-check by touching the upper left part, judge that the upper left area operates normally.

5.1.7 I/O check

■ I/O check function

The I/O check is a function which checks whether GOT and PLC can communicate with each other.
If I/O check ends normally, the communication interface and the connection cable hardwares are normal.
To execute I/O check, the communication driver has to be installed in GOT in advance from GT Designer3 or GT Designer2.
Note that the GOT restarts when this function is performed.
Refer to the following for the details related to the installation of the communication driver.

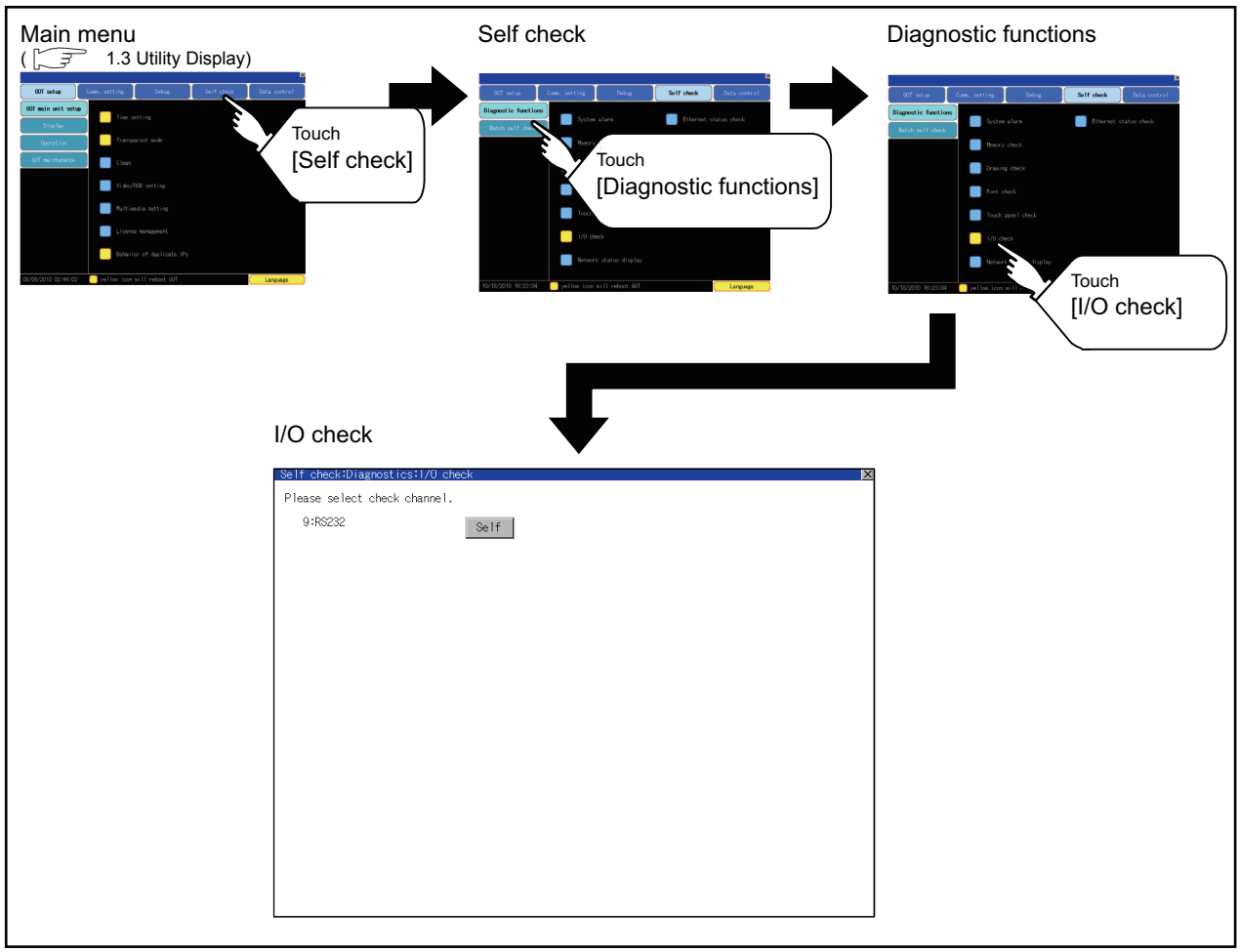
☞ • GT Designer3 Version1 Screen Design Manual (Fundamentals)
(7. COMMUNICATION WITH GOT)
• GT Designer2 Version□ Basic Operation/Data Transfer Manual
(8. TRANSFERRING DATA)

(1) Communication drivers inapplicable to I/O check

When the following communication drivers are used, the I/O check cannot be executed.

Connection type		Communication driver
Connection to MITSUBISHI PLC	MELSECNET/H connection	MELSECNET/H
	MELSECNET/10 connection	MELSECNET/H
	CC-Link IE Controller Network connection	CC-Link IE Controller Network
	CC-Link IE Field Network connection	CC-Link IE Field Network
	CC-Link connection (Intelligent device station)	CC-Link Ver.2(ID)
	Ethernet connection	Ethernet(MELSEC), Q17nNC, CRnD-700
Connection to FUJI FA PLC		FUJI PXR/PXG/PXH
Connection to YASKAWA PLC		YASKAWA GL/CP9200(SH/H)/CP9300MS, Ethernet (YASKAWA)
Connection to YOKOGAWA PLC		YOKOGAWA FA500/FA-M3/STARDOM, Ethernet (YOKOGAWA)
Connection to ALLEN-BRADLEY PLC		EtherNet/IP(AB)
Connection to SIEMENS PLC		SIEMENS S7-200, SIEMENS S7-300/400, Ethernet(SIEMENS S7)
Microcomputer connection		Computer
Inverter connection		FREQROL 500/700
MODBUS® /TCP connection		MODBUS/TCP
AZBIL control equipment connection		Azbil SDC/DMC
Connection to RKC temperature controller		RKC SR Mini HG (MODBUS)

■ Display operation of I/O Check

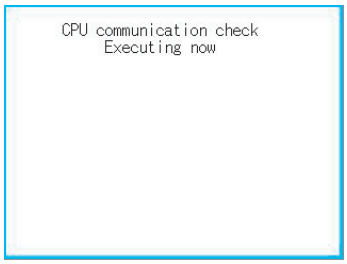


■ I/O check operation

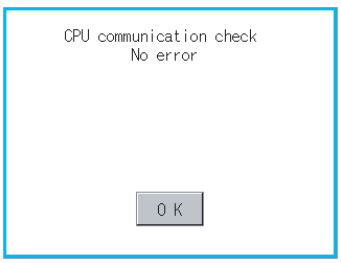
(1) Connecting target confirmation

If touch [CPU] button, the connecting target confirmation communication check is carried out.

1. After the CPU communication starts normally, the dialog box mentioned right notifying that it is on checking, untill the connecting target confirmation communication ends normally.



2. When the connecting target confirmation communication ends, its result is notified by dialog box.
If the connecting target confirmation communication ends normally, the dialog box notifying of the normal termination mentioned right is displayed.
If touch [OK] button after confirming the result, returns to [I/O check].



If the dialog box mentioned right is displayed after selecting connecting target confirmation or during CPU communication check, confirm the following.

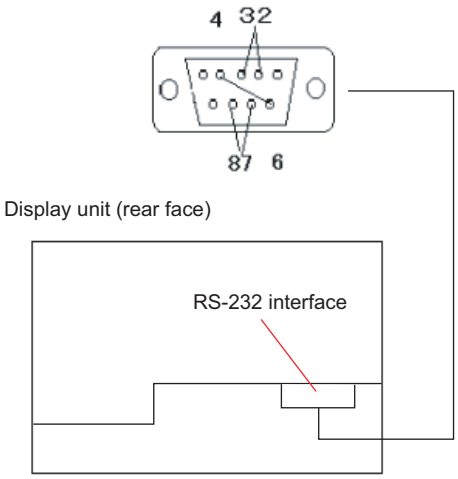
- No misconnection with CPU
  (☞ • GOT1000 Series Connection Manual for GT Works3 and a controller used (1.5 Verifying GOT recognizes controllers)
  • GOT1000 Series Connection Manual for GT Designer2/GT Works2 (3.3.6 Verifying GOT recognizes controllers))
- No missettings of parameter
  (☞ 3.2 Communication Detail Setting)
- No hardware error.
  (☞ (Hardware) 10. TROUBLESHOOTING)

If touch [OK] button in the dialog box After confirming the result, returns to [I/O check].

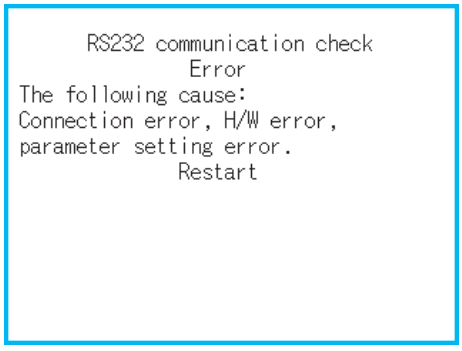
(2) Self-loopback

If touch [Self], the hardware check of RS-232 interface is carried out.

1. For preparation for the self-loopback communication check, insert the connector for self-loopback check (Customer purchased) shown in the diagram right in the RS-232 interface.
   For this connector, short 2 and 3 pins, 7 and 8 pins and 4 and 6 pins, respectively.
   In the communication setting of the GOT utility, set the channel number for the RS-232 interface to 0 ([None]).

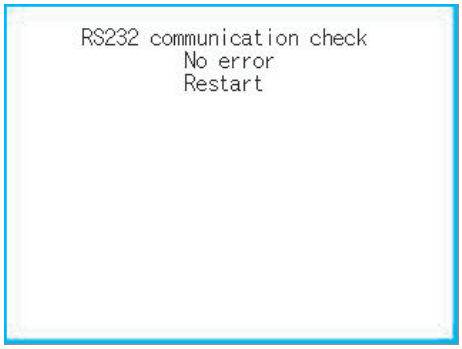


2. After selecting [Self], the transferred data and received data are verified through the self-loopback connector.
   When the GOT cannot receive the data during the data transmission, the dialog box shown right appears and the GOT restarts in five seconds.
   When the dialog box shown right appears, check the following.
   - Check if the pins of the connector for self-loopback check are incorrectly shorted.
   - Check if the channel number for the RS-232 interface is set to 0 ([None]) in the communication setting of the GOT utility.
     (☞ 3.1.3 Communication setting contents)
   - Check if the hardware has no problems.
     (☞ (Hardware) 10. TROUBLESHOOTING)



3. During check, the dialog box shown right is displayed.

4. When the all checks ended normally, the dialog box shown right is displayed. And the GOT restarts in five seconds.



5. When an error occurs, the dialog box that shows the GOT abnormal termination and the byte with the error appears, and then the GOT restarts in five seconds.
When the dialog box shown right appears, check the following.
• Check if the hardware has no problems.
((Hardware) 10. TROUBLESHOOTING)

5.1.8 Network status display

■ Functions of the network status display

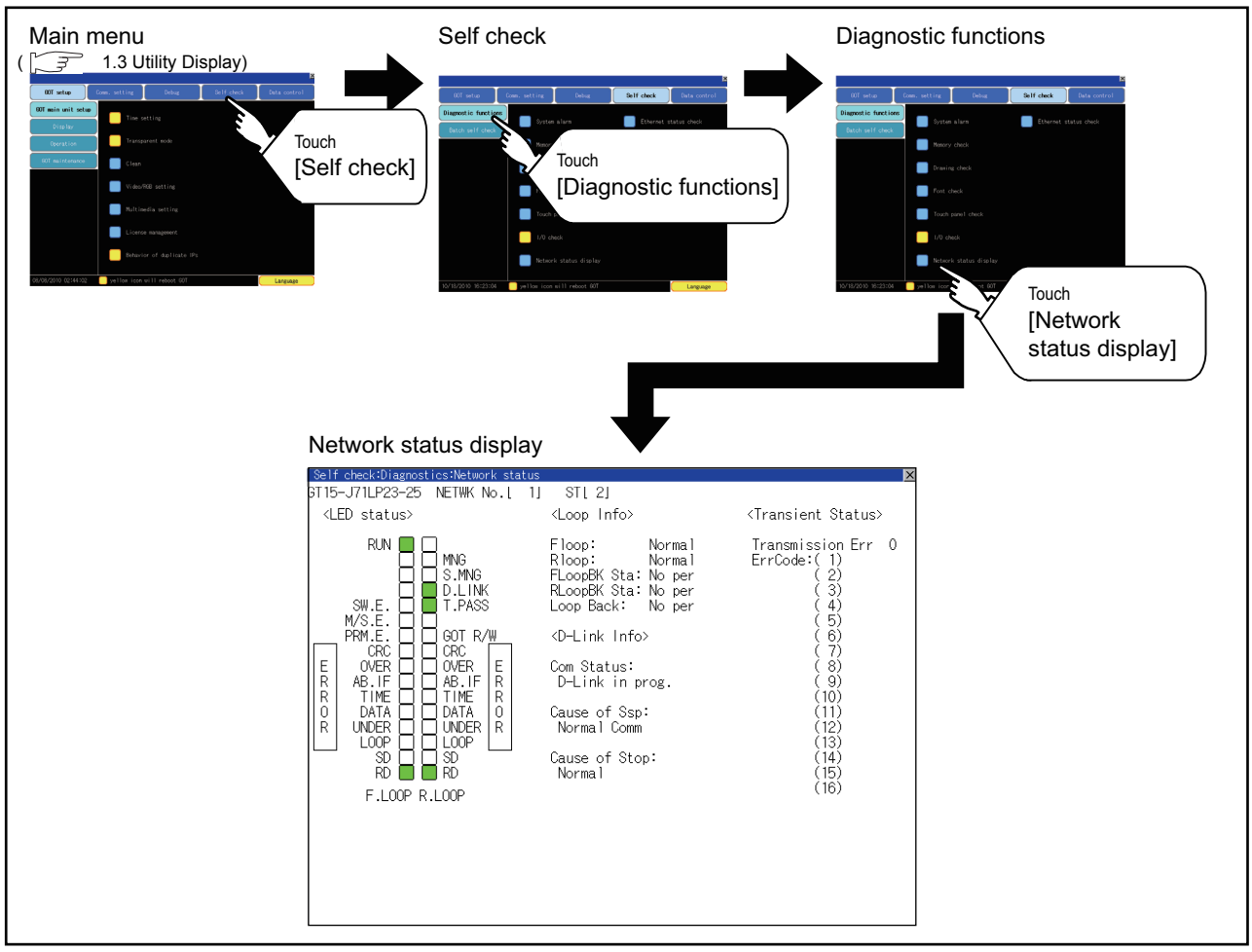
The network status display is a function that uses the communication units below to monitor the network status.

- MELSECNET/H communication unit (GT15-J71LP23-25, GT15-J71BR13)
- CC-Link IE Controller Network communication unit (GT15-J71GP23-SX)
- CC-Link IE Field Network communication unit (GT15-J71GF13-T2)
- CC-Link communication unit (GT15-J61BT13)

The LED status or error status of a network module can be checked.
For the corrective actions for errors that occur on the network, refer to the following manual.

☞ • The Reference Manual of the MELSECNET/H or MELSECNET/10 network system (PLC to PLC network) to be used
• CC-Link IE Controller Network Reference Manual
• The User's Manual of the CC-Link IE Field Network master/local module to be used
• The User's Manual of the CC-Link system master/local module to be used

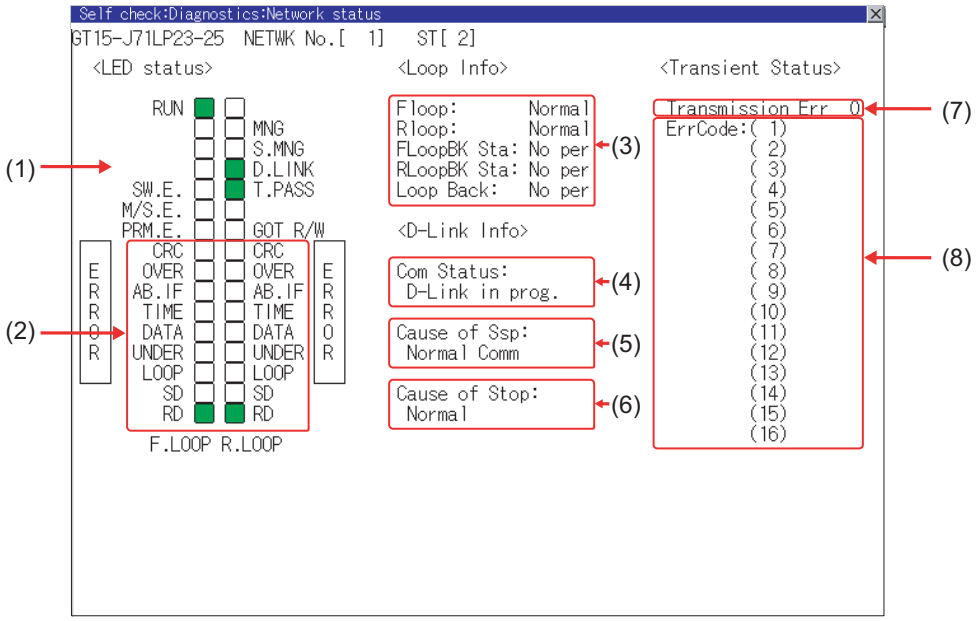
■ Displaying the network status display



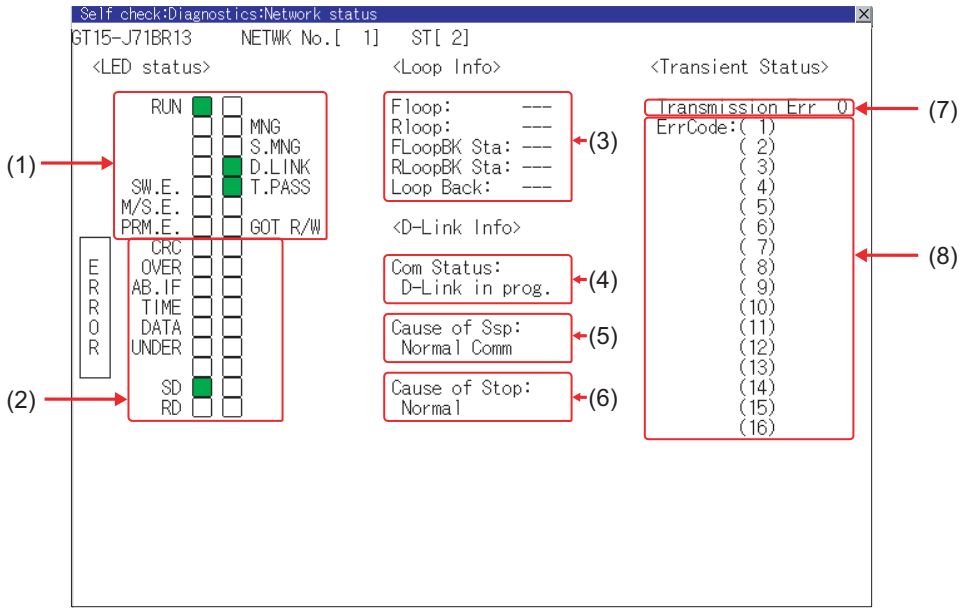
■ Display example of the network status display

(1) MELSENCNET/H communication unit

GT15-J71LP23-25



GT15-J71BR13



(a) LED status

Displays the MELSECNET/H communication unit operation status.

No.	Item	LED color*	Lit	Not lit
(1)	RUN	Green	Data link normal	Data link error
	MNG	Green	Operating as control station	Operating other than as control station
	S.MNG	Green	Operating as sub control station	Operating other than as sub control station
	D.LINK	Green	Data link being executed	Data link stopped
	T.PASS	Green	Baton pass being executed	Baton pass not executed
	SW.E.	Green	Switch setting error	Normal
	M/S.E.	Green	Duplicate station number and control station error	Normal
	PRM.E.	Green	Parameter error	Normal
	GOT R/W	Green	Accessed from GOT	Not accessed from GOT
(2)	CRC	Red	Code check error	Normal
	OVER	Red	Data entry delay error	Normal
	AB.IF	Red	All reception data 1	Normal
	TIME	Red	Time limit exceeded	Normal
	DATA	Red	Reception data error	Normal
	UNDER	Red	Send data error	Normal
	LOOP	Red	Forward/reverse loop reception error	Normal
	SD	Green	Sending data	
	RD	Green	Receiving data	

* For monochrome display, it is displayed as ■ (lit) or □ (not lit).

(b) Loop information

Displays the MELSECNET/H communication unit loop status.

No.	Item	Description
(3)	F loop*	Displays the status (Normal/NG) of the F loop.
	R loop*	Displays the status (Normal/NG) of the R loop.
	FLoopBK Sta*	Displays the F loopback station execution status (No per/Number of the station at which loopback is executed).
	RLoopBK Sta*	Displays the R loopback station execution status (No per/Number of the station at which loopback is executed).
	Loop Back *	Displays the loopback status (No per/Perf). No per: Loop normal, forward loop error, reverse loop error, data link not possible Perf: During loopback

* For the GT15-J71BR13, "---" is displayed.

(c) Data link information

Displays the MELSECNET/H communication unit data link information (communication status, cause of communication suspension, cause of communication stop).

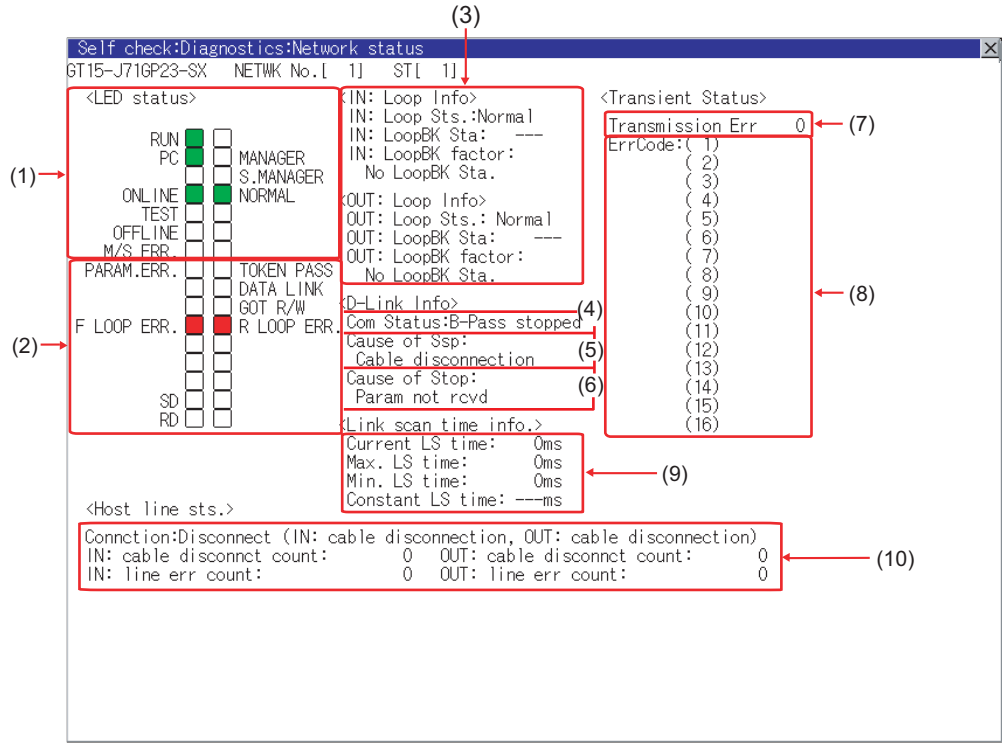
No.	Item	Description
(4)	Com Status	Displays the communication status of the host. D-Link in prog. : FData link being executed D-Link Stop(A)ss : Cyclic transmission stopped from other station D-Link Stop (H) : Cyclic transmission stopped by host B-Pass exec (No Area) : Host B/W send no allocation B-Pass exec (Param Err) : Error in host parameters B-Pass exec (Param unreceived) : Common parameters not received Disconnect (No B-Pass) : Station numbers duplicated, cable not connected Disconnect (Line Err) : Cable not connected Testing : Testing online/offline Reset. in prgr. : Hardware failure
(5)	Cause of Ssp	Displays the cause of disabled communication (transient transmission) of the host. Normal Comm : Communicating normally Offline : Offline Offline test : Testing offline Initialize : Error (error code: F101, F102, F105) Change Ctrl Sta : Error (error code: F104, F106) Testing Online : FError (error code: F103, F109, F10A) Baton Missing : Error (error code: F107) Baton Duplicated : Error (error code: F108) Dup Sta No : Error (error code: F10B) Dup Ctrl Sta : Error (error code: F10C) Rcv Retry Err : Error (error code: F10E) Send Retry Err : Error (error code: F10F) Time Out Err : Error (error code: F110) Abnormal Line : Error (error code: F112) Disconnection : Error (error code: F11B) No Own Sta Baton : Error (error code: F11F) Other (error code) : Error (error code: displayed)
(6)	Cause of Stop	Displays the cause of disabled data link (cyclic transmission) of the host. Normal : Communicating normally StopOrder : Cyclic transmission of all stations stopped from host or other station No Shared Param : Parameters cannot be received Bad Shared Param : Set parameter error Bad Self Sta CPU : A medium/critical error occurred in the host CPU Com Aborted : Host data link error occurred

(d) Transient status

Displays the number of transient transmission errors and the error code.

No.	Item	Description
(7)	Transmission Err	Displays the number of transient transmission errors.
(8)	ErrCode	Error histories of 16 errors are displayed in 16 lows from the latest.

(2) CC-Link IE Controller Network communication unit



(a) LED status

Displays the operation status of the CC-Link IE Controller Network communication unit.

No.	Item	LED color*	Lit	Not lit	Blink
(1)	RUN	Green	Operating normally	Hardware failure or WDT error	
	PC	Green	Data link being executed	Data link not executed	With communication error stations or duplicated station numbers
	ONLINE	Green	Online mode	Other than online mode	
	TEST	Green	Test mode	Other than test mode	
	OFFLINE	Green	Offline mode	Other than offline mode	
	M/S.ERR	Red	Duplicated control station or station No.	No duplicated control station or station No.	
	MANAGER	Green	Control station in operation	Other than control station in operation	
	S.MANAGER	Green	Sub-control station in operation	Other than sub-control station in operation	
	NORMAL	Green	Normal station in operation	Other than normal station in operation	
(2)	PARAM.ERR	Red	Parameter error	No parameter error	
	F LOOP ERR	Red	IN-side error	No IN-side error	
	SD	Green	Sending data	Not sending data	
	RD	Green	Receiving data	Not receiving data	
	TOKEN PASS	Green	Baton pass being executed	Baton pass not executed	
	DATA LINK	Green	Data link being executed (Cyclic transmission executed)	Data link not executed	Data link being executed (Cyclic transmission stopped)
	GOT R/W	Green	Offline, or hardware test, self-loopback test, internal self-loopback test or station-to-station test being executed	Online or circuit test being executed	
	R LOOP ERR	Red	OUT-side error	No OUT-side error	

* For monochrome display, it is displayed as ■ (lit) or □ (not lit).

(b) Loop information

Displays the loop status of the CC-Link IE Controller Network communication unit.

No.	Item	Description
(3)	IN: Loop Sts.	Displays the IN-side connection status of the host station. (Normal/Rev connect)
	IN: LoopBK Sta	Displays the station No. of the IN-side loopback station. (No loopback station: ---, value: 1 to 120)
	IN: LoopBK factor	Displays the cause of the loopback. (No LoopBK Sta./OUT: cable disconnection/ OUT: connecting a line/OUT: wrong cable connection)
	OUT: Loop Sts.	Displays the OUT-side connection status of the host station. (Normal/Rev connect)
	OUT: LoopBK Sta	Displays the station No. of the OUT-side loopback station. (No loopback station: ---, value: 1 to 120)
	OUT: LoopBK factor	Displays the cause of the loopback. (No LoopBK Sta./IN: cable disconnection/IN: connecting a line/IN: wrong cable connection)

(c) Data link information

Displays the data link information (Com Status, Cause of Ssp, Cause of Stop) of the CC-Link IE Controller Network communication unit.

No.	Item	Description
(4)	Com Status	Displays the communication status of the host station. D-Link in prog. D-Link stopped B-Pass exec B-Pass stopped Testing Offline Offline
(5)	Cause of Ssp	Displays the cause of the interrupted communication (transient transmission) of the host station. Normal Comm Cable disconnection Wrong cable connection Checking cable IN/OUT Disconnecting/returning to system Offline Offline test Self-check mode
(6)	Cause of Stop	Displays the cause of the interrupted data link (cyclic transmission) of the host station. Normal Comm StopOrder D-Link observation timer time up Testing Line Param not rcvd Host out of range Host reservation Dup Host No. Dup CtrlSta Sta.No. not set Invalid Network No. Param Err Params in comm. CPU stop error CPU pwr stp err

(d) Transient status

Displays the number of transient transmission errors and the error codes.

No.	Item	Description	
(7)	Transmission Err	Displays the number of transient transmission errors.	
(8)	ErrCode	Other than GT155□	The histories of 16 latest errors are displayed in 16 rows in reverse chronological order.
		GT155□	Only the latest error is displayed in one row.

(e) Link scan time information

Displays the link scan time.

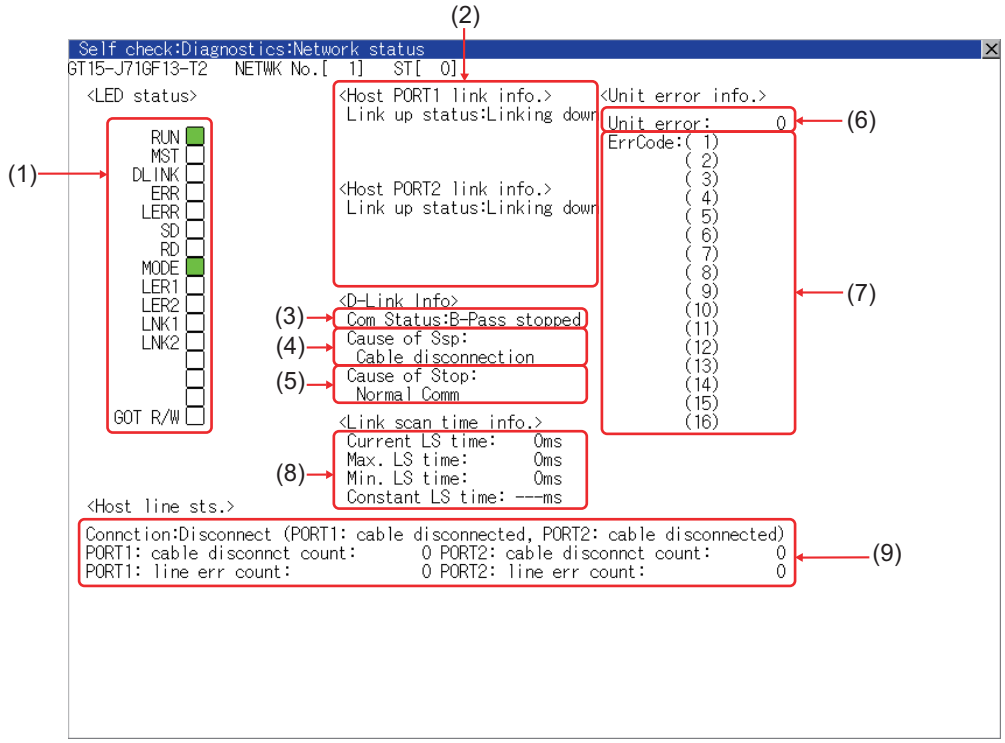
No.	Item	Description
(9)	Current LS time	Displays the current link scan time.
	Max. LS time	Displays the maximum link scan time.
	Min. LS time	Displays the minimum link scan time.
	Constant LS time	Displays the link scan time set in the parameter.

(f) Host station line status

Displays the connection status of the CC-Link IE Controller Network communication unit.

No.	Item	Description
(10)	Connction	Displays the connection status of the host station.
		Normal
		IN: Loop Back (OUT: cable disconnection)
		IN: Loop Back (OUT: connecting a line)
		IN: Loop Back (OUT: wrong cable connection)
		OUT: Loop Back (IN: cable disconnection)
		OUT: Loop Back (IN: connecting a line)
		OUT: Loop Back (IN: wrong cable connection)
		Disconnect (IN: cable disconnection, OUT: cable disconnection)
		Disconnect (IN: cable disconnection, OUT: connecting a line)
		Disconnect (IN: cable disconnection, OUT: wrong cable connection)
		Disconnect (IN: connecting a line, OUT: cable disconnection)
		Disconnect (IN: connecting a line, OUT: connecting a line)
		Disconnect (IN: connecting a line, OUT: wrong cable connection)
		Disconnect (IN: wrong cable connection, OUT: cable disconnection)
		Disconnect (IN: wrong cable connection, OUT: connecting a line)
		Disconnect (IN: wrong cable connction, OUT: wrong cable connction)
	IN: cable disconnct count	0: No error, 1 or more: Number of accumulated errors
	IN: line err count	0: No error, 1 or more: Number of accumulated errors
	OUT: cable disconnct count	0: No error, 1 or more: Number of accumulated errors
	OUT: line err count	0: No error, 1 or more: Number of accumulated errors

(3) CC-Link IE Field Network communication unit



(a) LED status

Displays the CC-Link IE Field Network communication unit operation status.

No.	Item	LED color*	Lit	Not lit	Blink
(1)	RUN	Green	Operating normally	Hardware failure or WDT error occurred, communication unit being reset	
	MST	Green	Operating as master station	Operating other than as master station	
	DLINK	Green	For online mode: Data link being executed For test mode: Test completed	For online mode: Data link stopped For test mode: Test being executed	Data link being executed
	ERR	Red	Communication error occurred	Normal, unit being reset	Faulty data link station
	LERR	Red	Reception data error	Reception data normal	
	SD	Green	Sending data	Not sending data	
	RD	Green	Receiving data	Not receiving data	
	MODE	Green	Online mode	Offline mode	Test mode
	LER1	Red	PORT1 side reception frame error	PORT1 side reception frame normal	
	LER2	Red	PORT2 side reception frame error	PORT2 side reception frame normal	
	LINK1	Green	PORT1 side linking up	PORT1 side linking down	
	LINK2	Green	PORT2 side linking up	PORT2 side linking down	
	GOT R/W	Green	Accessed from GOT	Not accessed from GOT	

* For monochrome display, it is displayed as ■ (lit) or □ (not lit).

(b) Link information

Displays the CC-Link IE Field Network communication unit link status.

No.	Item		Description
(2)	Host PORT1 link info.	Link up status	Displays the link up status (Linking up/Linking down) of the host station PORT1 side.
	Host PORT2 link info.	Link up status	Displays the link up status (Linking up/Linking down) of the host station PORT2 side.

(c) Data link information

Displays the data link information (Com Status, Cause of Ssp, Cause of Stop) of the CC-Link IE Field Network communication unit.

No.	Item	Description
(3)	Com Status	Displays the communication (data link) status of the host station. D-Link in prog. B-Pass exec B-Pass stopped Testing Offline Offline
(4)	Cause of Ssp	Displays the cause of the interrupted communication (baton pass) of the host station. Normal Comm Cable disconnection Disconnecting/returning to system Offline Offline test - H/W test Offline test - self-loopback test Offline test - shipping test
(5)	Cause of Stop	Displays the cause of the interrupted data link (cyclic transmission) of the host station. Normal Comm StopOrder D-Link observation timer time up Slave stations do not exist Param not rcvd Host out of range Host reservation Dup Host No. Dup Master Sta.: Master detected Sta.No. not set Param Err(Other) Params in comm. CPU stop error Invalid ring configuration

(d) Unit error information

Displays the number of unit errors and the error codes.

No.	Item	Description
(6)	Unit error	Displays the number of unit errors.
(7)	ErrCode	Error histories of 16 errors are displayed in 16 lows from the latest.

(e) Link scan time information

Displays the link scan time.

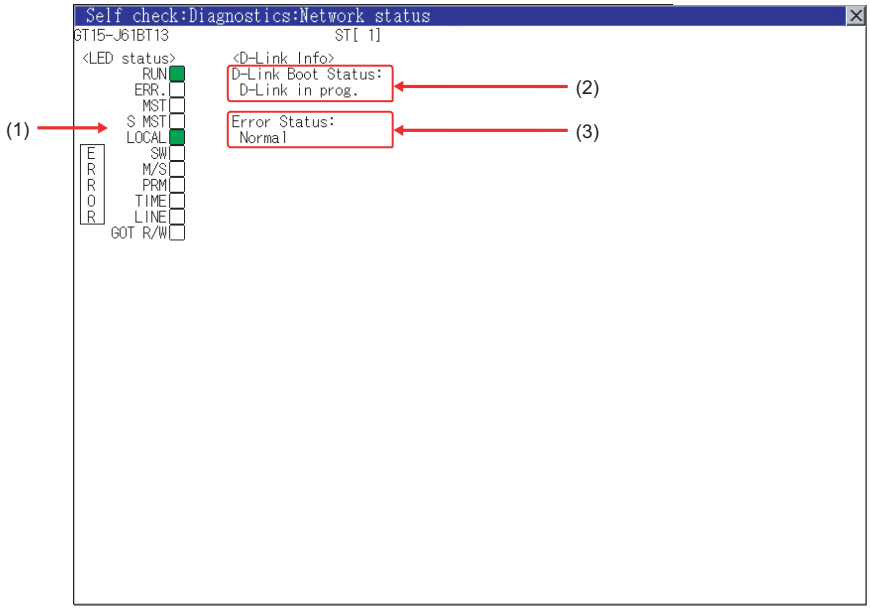
No.	Item	Description
(8)	Current LS time	Displays the current link scan time.
	Max. LS time	Displays the maximum link scan time.
	Min. LS time	Displays the minimum link scan time.
	Constant LS time	Displays the link scan time set in the parameter.

(f) Host station line status

Displays the connection status of the CC-Link IE Field Network communication unit.

No.	Item	Description
(9)	Connection	Displays the connection status of the host station.
		Normal (PORT1: communicating, PORT2: communicating)
		Normal (PORT1: communicating, PORT2: cable disconnected)
		Normal (PORT1: in loopBK communication, PORT2 cable disconnected)
		Normal (PORT1: cable disconnected, PORT2: communicating)
		Normal (PORT1: cable disconnected, PORT2: in loopBK communication)
		Disconnect (PORT1: cable disconnected, PORT2: cable disconnected)
		Disconnect (PORT1: cable disconnected, PORT2: connecting a line)
		Disconnect (PORT1: connecting a line, PORT2: cable disconnected)
		Disconnect (PORT1: connecting a line, PORT2: connecting a line)
	PORT1: cable disconnct count	0: No error, 1 or more: Number of accumulated errors
	PORT1: line err count	0: No error, 1 or more: Number of accumulated errors
	PORT2: cable disconnct count	0: No error, 1 or more: Number of accumulated errors
	PORT2: line err count	0: No error, 1 or more: Number of accumulated errors

(4) CC-Link communication unit



(a) LED status

Displays the CC-Link communication unit (GT15-J61BT13) operation status.

No.	Item	LED color	Lit	Not lit	Blink
(1)	RUN	Green	Running normally	WDT error occurred or unit being reset	
	ERR.	Red	All station communication error	No communication error occurred or unit being reset	There is a communication error station or duplicated station numbers.
	TIME	Red	No responses from all stations due to cable breakage or transmission path affected by noise	Responses from all stations	
	MST	Green	Operating as master station	Operating other than as master station	
	SW	Red	Switch setting error	No switch setting error	
	LINE	Red	Cable breakage error	No cable breakage error	
	S MST	Green	Operating as standby master station	Operating other than as standby master station	
	M/S	Red	Duplicate master station error	No duplicate master station error	
	LOCAL	Green	Operating as local station	Operating other than as local station	
	PRM	Red	Parameter error	No parameter error	
	GOT R/W	Green	Accessed from GOT	Not accessed from GOT	

(b) Data link information

Displays the CC-Link communication unit (GT15-J61BT13) data link startup status and error.

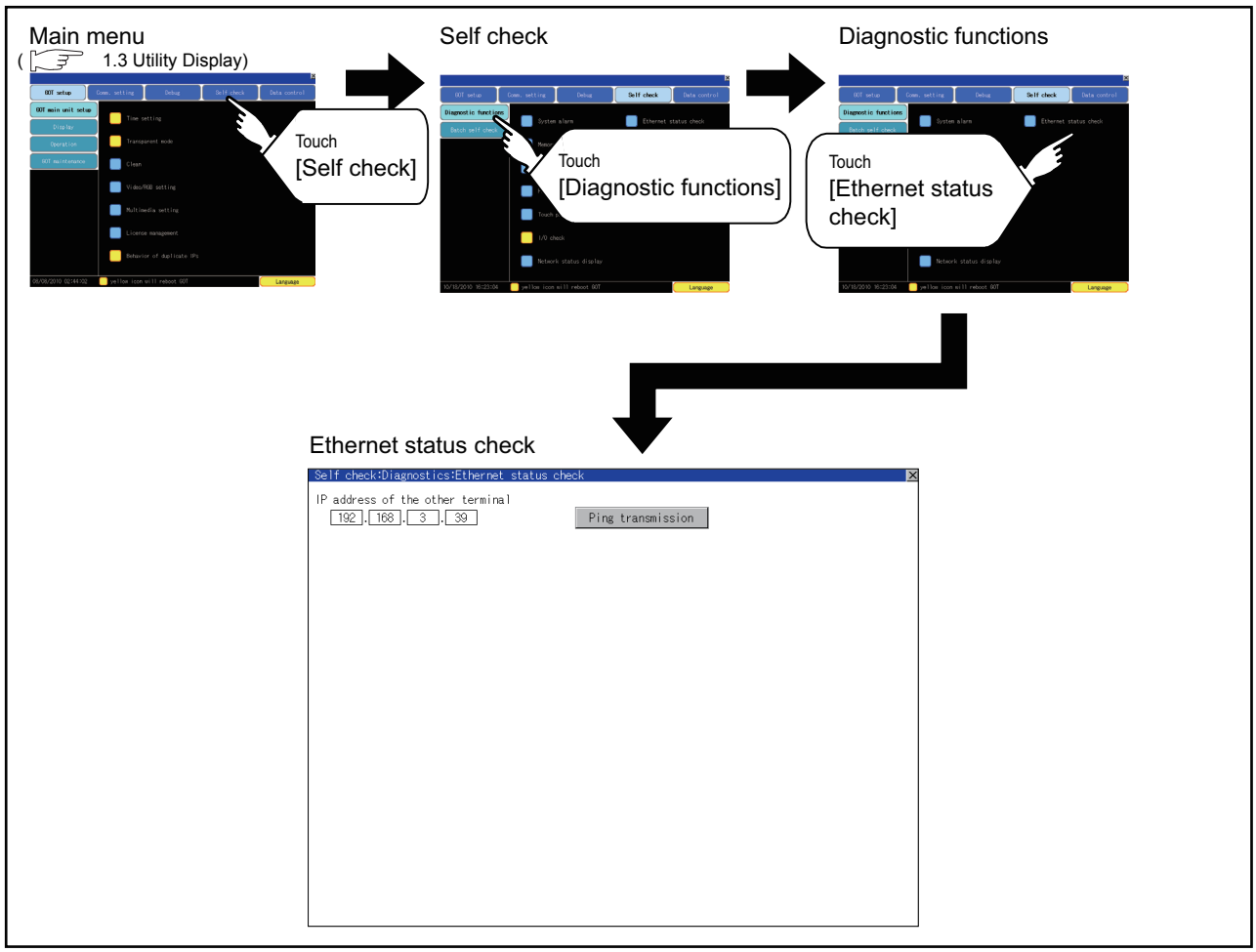
No.	Item	Description
(2)	D-Link Boot Status	Displays the data link startup status. D-Link in prog. : Data link being executed D-Link Offline : Data link being stopped Initialize : Set to the initial status Parameter wait : Parameter not received Disconnect (No Polling) : In cut-off status with no inquiry from master station Disconnect (Line Err) : In cut-off status due to line error Disconnect (Other) : In cut-off status due to other causes Testing Line : Line test being executed Testing Pram Setup : Parameter setting test being executed from master station Auto Reconnecting : Return processing being executed automatically Reset. in prgr. : CC-Link communication unit being reset (GOT reset status)
(3)	Error Status	Displays the status of the current error. Normal : Normal status Invalid TransPath : Transmission path error detected Invalid Parameter : Parameter error detected CRC Error : Reception data error detected Time Out Error : Timeout error detected in data reception Abort Error : Error detected in data communication Invalid Setup : Invalid station number, station type, transmission speed, or mode setting detected Other Abnormality : Error due to some other cause detected

5.1.9 Ethernet status check

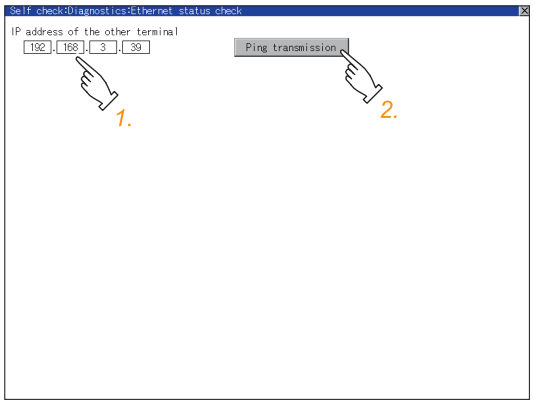
■ Ethernet status check function

Ethernet status check is a function that sends a ping to check the connection status with the equipment on the Ethernet.

■ Display operation of Ethernet status check



■ Operation of Ethernet status check



1. If touch the select button of [IP address of the other terminal], a keyboard is displayed.
   Enter the IP address of the other terminal with the keyboard.
   <Default: 192.168.3.18>

2. If touch the [Ping transmission] button, a ping is sent to the IP address entered in [IP address of the other station].
   The result is displayed in the dialog box.
   The timeout time is about 5sec.

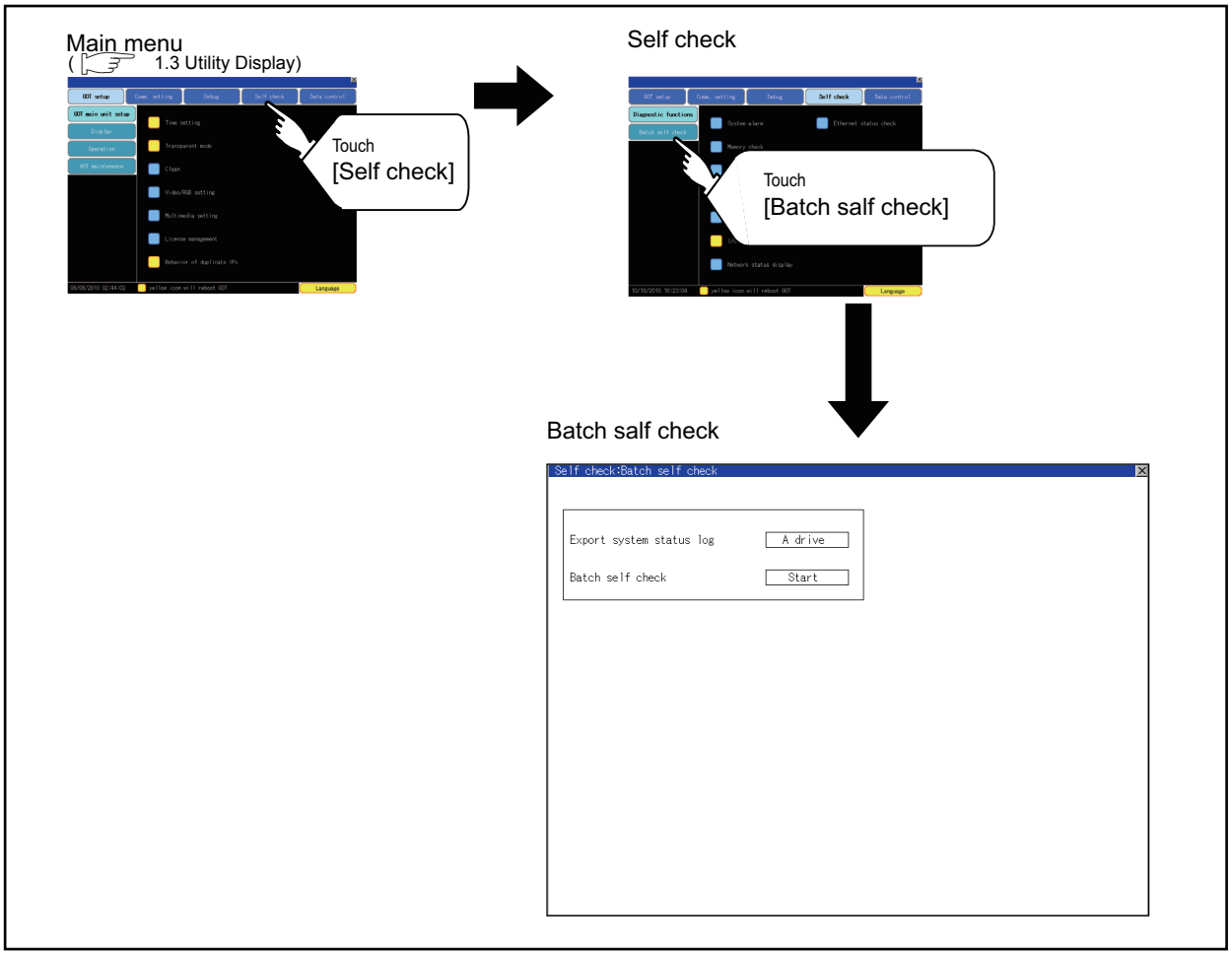
5.2 Batch Self Check

5.2.1 Batch self check

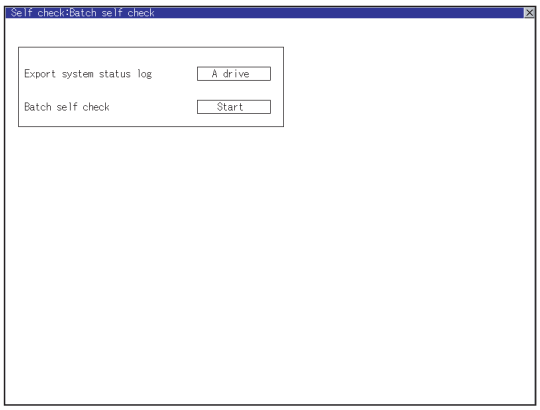
The Batch self check collects data about energization time, installed OS and others, and can display it in View self check results menu.
In the Batch self check screen, the CF card or USB memory can be set as save destination of the log.
Also, the following information are displayed in View self check results menu.

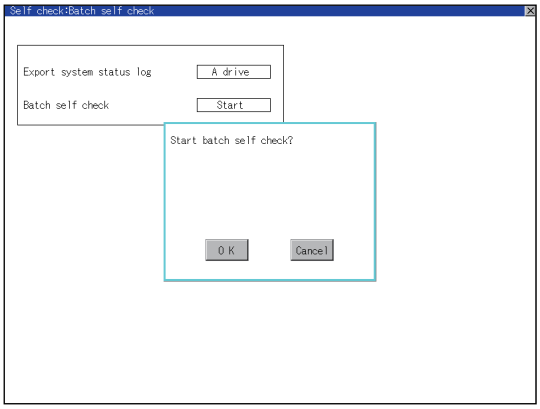
Item	Description	For GT Designer2	For GT Designer3
Start up information	Information at power-on, Information at system start up, Maintenance time notification information	○	○
System status 1	Installed OS, Installation history	○	○
System status 2	Communication driver, GOT system configuration information	○	○
Communication setting contents	Displays the controller status.	○	○
Operation history	Displays the operation history and execution time.	○	○
Screen switching history	Displays the screen switching history and execution time.	○	○
Clock change history	Displays the time before and after clock change.	○	○
System alarm history	Displays the alarm and alarm occurrence time.	○	○
CPU error history	Displays the ChNo., error messages and error occurrence time.	○	○
GOT start time history	Displays the time GOT was powered on.	×	○

5.2.2 Display operation of batch self check



■ Batch self check



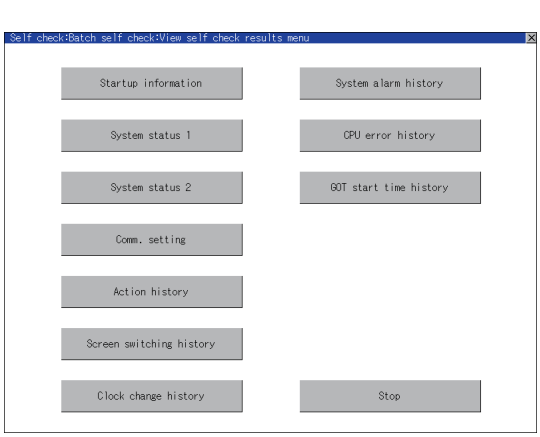


1. Each time the Export item on system status log is touched, the displayed drive changes as follows: A drive → B drive → E drive → Not exported → A drive.
   When selecting A drive or B drive, install the CF card. When selecting the E drive, install the USB memory.
   If Batch self check is started without installing the CF card or USB memory, the system status log will not be saved.
   (The system status log is for manufacturer investigation only. Customers cannot view it.)

2. Touch the [Start] button to start Batch self check.
   Touch the ☒ button to return to the main menu.

■ View self check results menu

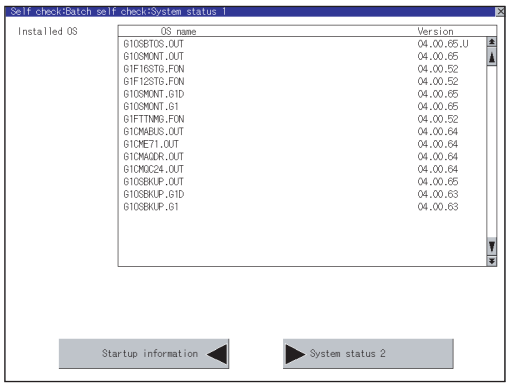
After completion of Batch self check, the following screen is displayed.
Touch each item to display the details screen.
Touch the [Stop] button to return to the Batch self check screen.



(1) Display example of details screen

Touch the items to display the following screens.

Touch the [×] button to return to the View self check results menu.



Touch the button in the left bottom of the screen to display the previous screen.
Touch the button in the right bottom of the screen to display the next screen.

6. DATA CONTROL

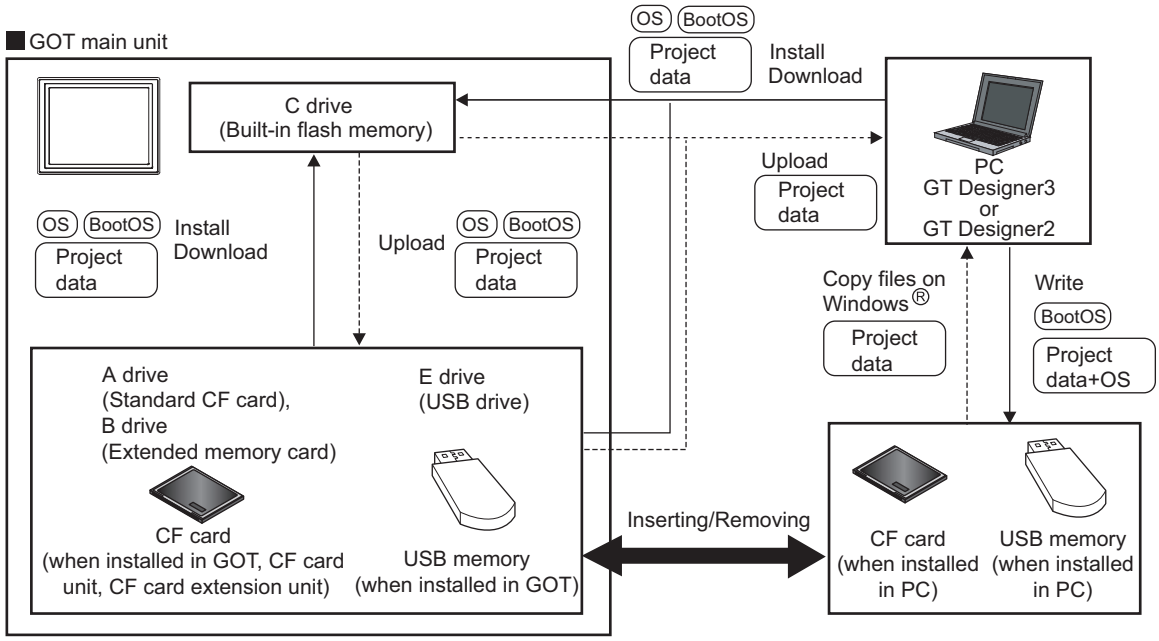
OS, project data (screen data) or alarm data which is written in the GOT, CF card or USB memory can be displayed, and data can be transferred between GOT and CF card or USB memory.
The format of the CF card or USB memory is also possible.

6.1 Data Storage Location

6.1.1 Data type and the storage location

■ System

The data storage location and transferring (write/read) route for each data type are shown below.
Also, the data storage locations are shown below.



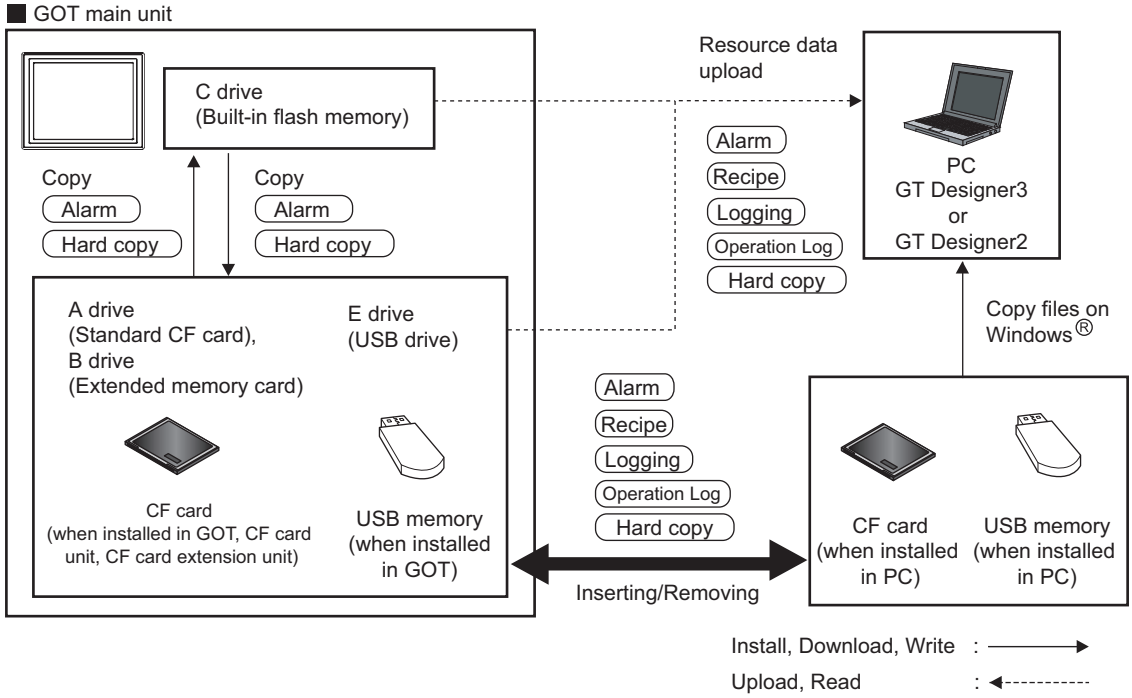
Item	Data type	Storage location
BootOS	BootOS	• Built in flash memory (C drive)
OS *1	Standard monitor OS	• Standard CF card (A drive) • Built-in flash memory (C drive) *2
	PLC communication driver	
	Extended function OS	
	Option OS	
Project data *1	Project data (Including recipe setting, alarm conditions, time action, and GOT setup.)	• Standard CF card (A drive) • Extended memory card (B drive) *2 • Built-in flash memory (C drive) *2

*1 The USB memory can be used from Utility.

7.3.2 Installing using the data control function (Utility)

*2 When using the project data stored in the Standard CF Card (A drive) or extended memory card (B drive) with the GOT, hold the CF card installed to the GOT.
For the USB memory, store the project data to the Standard CF Card (A drive), extended memory card (B drive) or Built-in flash memory (C drive).

■ At maintenance



The data of the build in flash memory (Project data, etc.) can be saved even if the battery voltage becomes low.

Item	Data type	Storage location
Alarm	Alarm data (Extended alarm log file and alarm log file)	• Standard CF card (A drive) • USB drive (E drive)*1
Recipe	Recipe data (Advanced recipe file, Recipe file)	
Logging	Logging (Logging file)	
Operation Log	Operation log (Operation log file)	
Hard copy	Image file (Hard copy function)	

*1 The USB memory can be used from Utility.

7.3.2 Installing using the data control function (Utility)

6.1.2 OS version confirmation

Confirm the OS version carefully when install BootOS and standard monitor OS.
When OS is installed, GOT checks and compares the OS version automatically.

(1) When install BootOS

When the BootOS to be installed has the older major version, GOT displays the installation disapproving message to cancel the installtion so that the older version may not be written.
(Even when the version of the BootOS to be installed has the same or later version, the version information and the dialog box for selecting continue/not continue will be displayed.)
Depending on the Installation method, the dialog box to be displayed varies.

- When installing from the standard CF card, the dialog box is displayed by the main unit.
- When installing from GT Designer3 or GT Designer2 via USB, RS-232 or Ethernet, the dialog box is displayed by the GT Designer3 or GT Designer2.

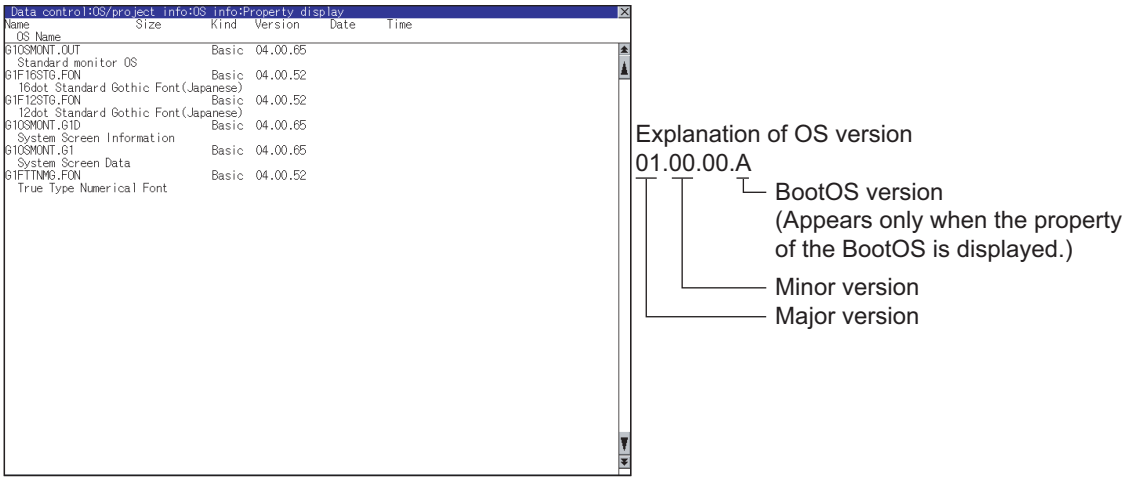
(2) When install standard monitor OS, communication driver, option OS

When standard monitor OS, communication driver, or option OS has already been installed, the version information of the OS which has been installed and the dialog box for selecting continue/not continue will be displayed.
Moreover, when the different versions will coexist amoung all OSs (standard monitor OS, communication driver, and option OS) by installing OS, the installation disapproving dialog will be displayed and the installation process is canceled.

(3) When download project data

GOT automatically compares the version between the project data to be downloaded and the installed OS.
When the versions are different, the dialog box confirming whether to install the OS together is displayed.
When downloading the project data from the CF card or USB memory, storing the project data and OS beforehand is recommended.

The version of each OS installed in the GOT can be confirmed by [Property] of [OS information] screen.



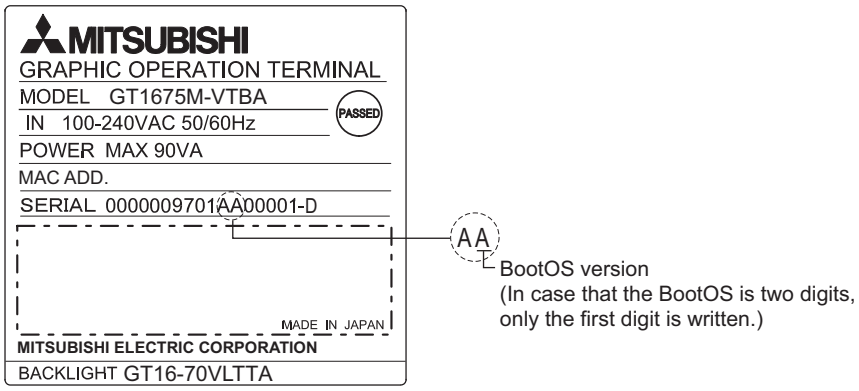
Refer to the following for details of the screen display operation.

6.3.1 OS information

POINT

Version confirmation of BootOS by rating plate

Confirm the version of BootOS installed in the GOT at product shipment by rating plate of GOT rear face.



6.1.3 Capacity confirmation of the project data downloading location

When download the project data, confirm the capacity of the user area in the drive to which transferred, the transferred project data size, the transfer size and buffering area size of the optional function OS in advance to judge whether to carry out the download.
The capacities can be confirmed by GT Designer3 or GT Designer2.
Refer to the following for details.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(7.5.2 Drive capacity required for data transfer)

•GT Designer2 Version☐ Basic Operation/Data Transfer Manual
(8.1.2 Drive capacity required for data transfer)

6.1.4 Display file

The display screen and storage destination for each type of data are shown below.
The file name and contents of each data can be displayed with property display of the utility

Item		Display screen	Storage destination (Drive name/folder name)
BootOS		OS information screen	A drive/B drive/C drive/E drive:\G1BOOT*2
Standard monitor OS	Standard monitor OS system screen data		A drive/B drive/C drive/ E drive*3 :\G1SYS*2
	Standard monitor OS system screen management information file		
	Standard monitor OS (monitor function)		
	6 × 8-dot font (ASCII characters)		
	24-dot numerical HQ font		
	32-dot numerical HQ font		
	TrueType numerical font		
	12-dot standard font		
	16-dot standard font		
Extended function OS			
Option OS			
Communication driver			
Project data*1		Project information screen	A drive/B drive/C drive:/E drive*3 PROJECT1*2*4
	User-created screen data		
	Comment data		
	12-dot HQ fonts (Mincho/Gothic)		
	16-dot HQ fonts (Mincho/Gothic)		
	TrueType (Mincho/Gothic)		
Resource data	Advanced alarm log file CSV file *5	Alarm information screen	A drive/B drive/E drive*6:\ With GT Designer3 or GT Designer2, any folder name or file name can be specified.*2
	Advanced alarm log file TXT file *5		
	Advanced alarm log file binary file *5		
	Alarm log file CSV file *5		
	Hard copy file BMP file *5	Hard copy information screen	
	Hard copy file JPG file *5		
	Advanced recipe file CSV file *5	Advanced recipe information screen	
	Advanced recipe file TXT file *5		
	Advanced recipe file binary file *5		
	Operation log file CSV file *5	Operation log information screen	
	Operation log file TXT file *5		
	Operation log file binary file *5		
	Logging file CSV file *5	Logging infomation screen	
	Logging file TXT file *5		
	Logging file binary file *5		

*1 The user-created screen data, comment data, and font data are displayed as project data.
*2 Each folder is created automatically when a file is installed, downloaded, or uploaded.
*3 The USB memory cannot be activated directly from the E drive. It can be used only for data storage.
6.3.1 OS information
*4 The folder names and file names can be set at [System Settings] in [System Environment] of GT Designer3 or GT Designer2 .
•GT Designer3 Version1 Screen Design Manual (Fundamentals)(4.1 GOT Type Setting)
•GT Designer2 Version ☐ Screen Design Manual (3.1 GOT/Controller Type Setting)
*5 A serial number is automatically added to file names.
*6 Each function does not provide direct storage to the E drive.

6.2 Various Data Control

6.2.1 Alarm information

■ Function of alarm information

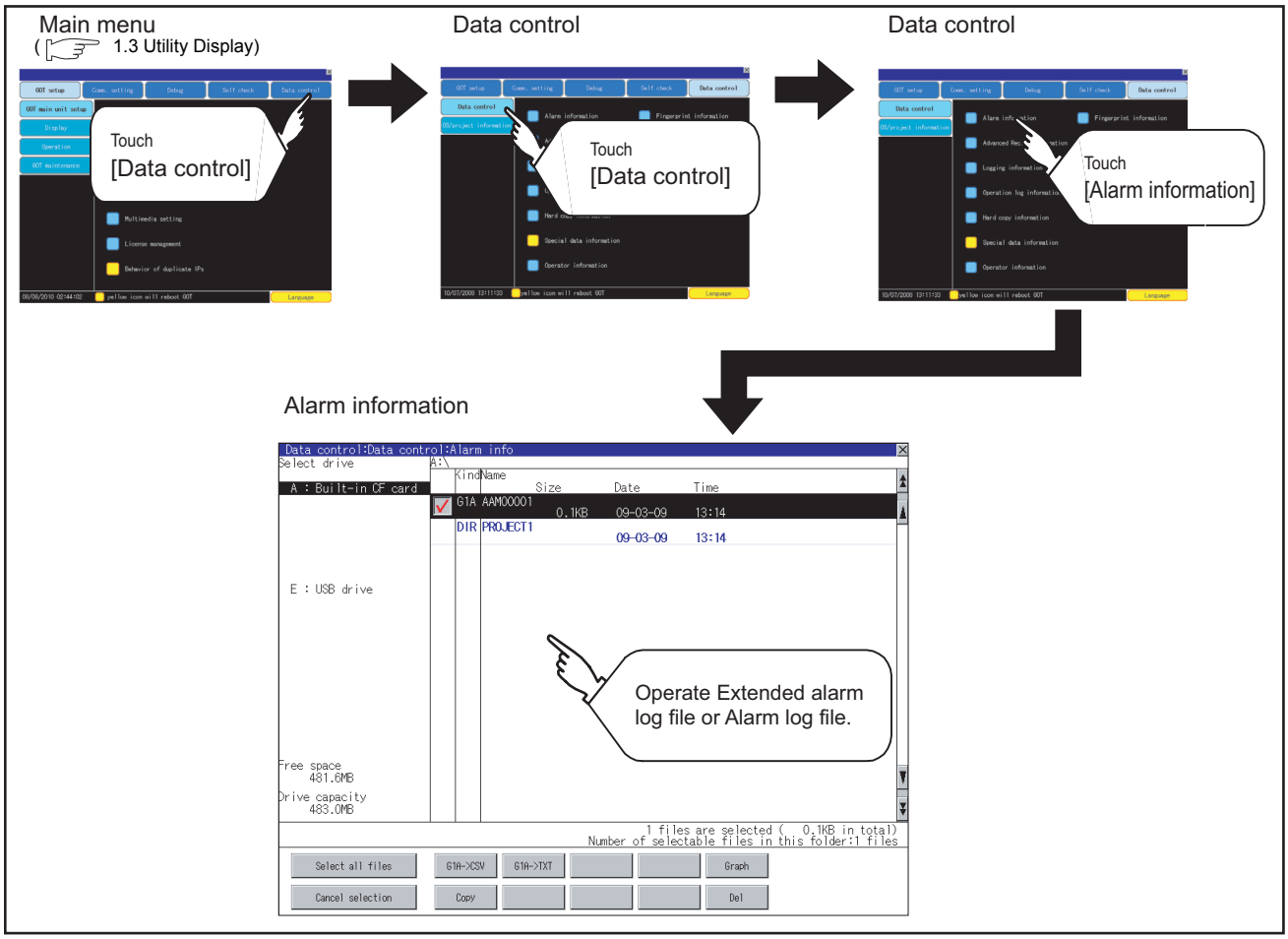
The extended alarm log file or alarm log file held by each drive (A: Built-in CF card, B: Extended memory card, C: Flash Memory, E: USB drive) is displayed.
The functions below can be carried out for files.
The USB drive only stores log files, and cannot be displayed.
For details of Advanced Alarm, refer to the following manual.

☞ •GT Designer3 Version1 Screen Design Manual (Functions) (10 ALARM)

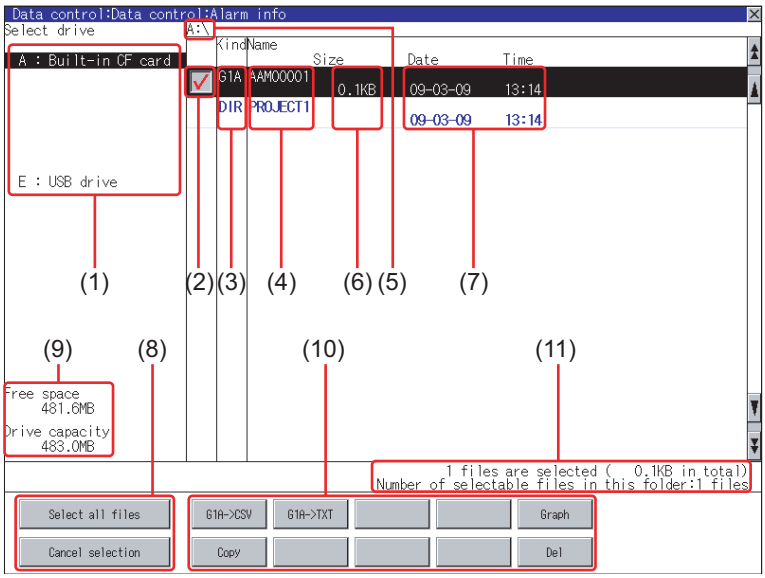
•GT Designer2 Version☐ Screen Design Manual (8 ALARM)

Function	Description	For GT Designer2	For GT Designer3	Reference
Information display of files and folders	Displays name, data size, creation date and time of file or folder.	○	○	■The display example of alarm information, ■Record save operation
G1A → CSV conversion	Converts the G1A file of advanced alarm log file to CSV file.	○	○	(2) G1A CSV conversion operation, G1A TXT conversion operation
G1A → TXT conversion	Converts the G1A file of advanced alarm log file to TXT file.	○	○	(2) G1A CSV conversion operation, G1A TXT conversion operation
Deletion	Deletes file.	○	○	(3) Deletion operation
Copy	Copys file.	○	○	(4) Copy operation
Graph	Displays the advanced alarm watch result by historical graph or tally graph.	○	○	(5) Graph operation

■ The display operation of alarm information



■ The display example of alarm information



Number	Item	Description
(1)	Select drive	The drive which displays file or folder can be selected. When CF card or USB memory is not installed, the following drives are not displayed. ・ CF card: [A: Built-in CF card], [B: Memory card] ・ USB memory: [E: USB drive]
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. In case of file, displays the extension; in case of folder, displays "DIR".
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the nondisplayed part with the [Copy] button, etc. ((4) Copy operation) After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive/folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Date and time	The date and time when each file was created are displayed.
(8)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files is exceeds 513, the first 512 files are selected.
(9)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

Display of creation date and time

The creation date and time display is not updated even if a file is created or updated while displaying the alarm information display screen.
If close the screen currently displayed (moving the screen to the folder of the upper hierarchy, etc.) and display the screen again, the updated contents are displayed.

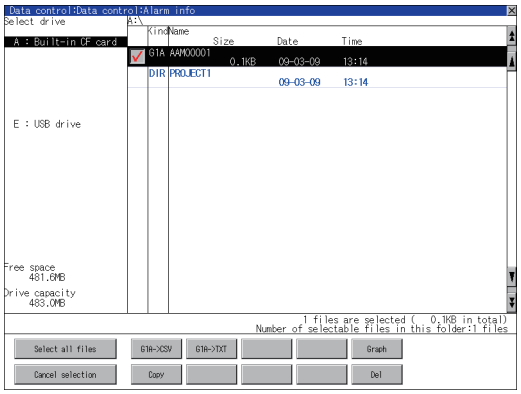
HINT

Folders and files displayed

For the folders and files displayed, refer to the following.
6.1.4 Display file

■ Alarm information operation

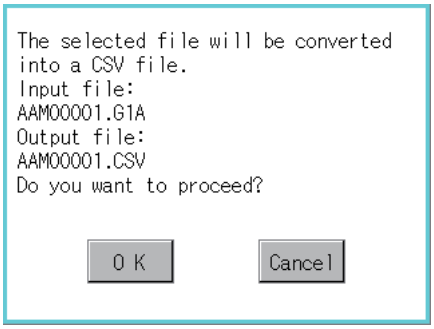
(1) The display operation of alarm information



1. If touch a drive of [select drive], the information of the touched drive is displayed.
2. If touch a folder name, the information of the touched folder is displayed.
3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.
4. If touch ▲▼ button of the scrollbar, the screen scrolls up/down by one line.
   If touch ⏫⏬ button, the screen scrolls up/down by one screen.
5. Touch the check box to select the file.
6. Refer to the following for G1A → CSV, G1A → TXT, delete, copy, graph operations.
   G1A → CSV ,
   G1A → TXT..... ☞ (2) G1A CSV conversion operation, G1A TXT conversion operation
   Delete..... ☞ (3) Deletion operation
   Copy..... ☞ (4) Copy operation
   Graph..... ☞ (5) Graph operation
7. If touch ☒ button, the screen is closed.

(2) G1A → CSV conversion operation, G1A → TXT conversion operation

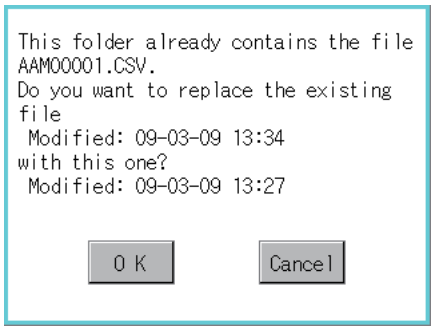
The selected G1A file is converted to CSV file or TXT file.

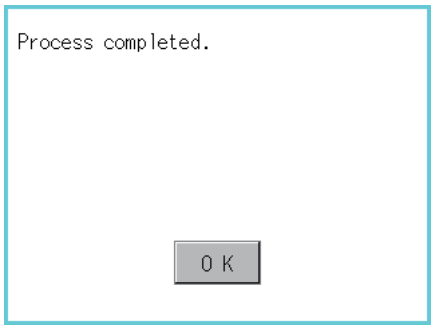


1. Touch the check box of the G1A file which is to be converted to CSV file or TXT file to select the file.
2. The following dialog box is displayed when touching the following button according to the file type to convert to.
   - CVS file: [G1A → CSV] Button
   - TXT file: [TXT → CSV] Button

(Continued to next page)

(Example: Dialog box when [G1A->CSV] button is touched)





3. Touch [OK] button.
When the file, whose name is the same, exists in the destination folder, the dialog box showed at left appears without starting the conversion.

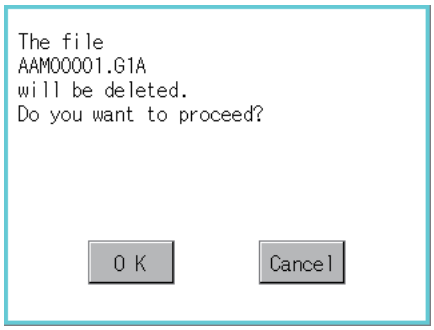
If touch the [OK] button, overwrites the file.

If touch [Cancel] button, cancels the conversion.

4. The message of completion is displayed in dialog box when conversion is completed.
If touch [OK] button, the dialog box is closed.

(3) Deletion operation

Deletes selected files.



1. Touch the check box of the file to delete to select the file.
2. If touch [Del] button, the dialog box mentioned left is displayed.

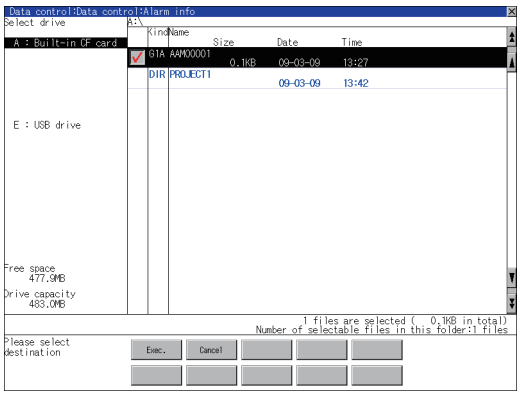
If touch [OK] button, the file is deleted.

If touch [Cancel] button, the deletion is canceled.

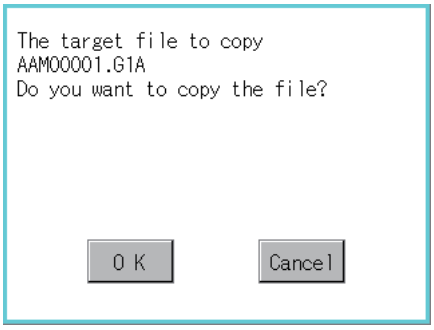
3. When the deletion is completed, the completion dialog box is displayed.
If touch [OK] button, the dialog box is closed.

(4) Copy operation

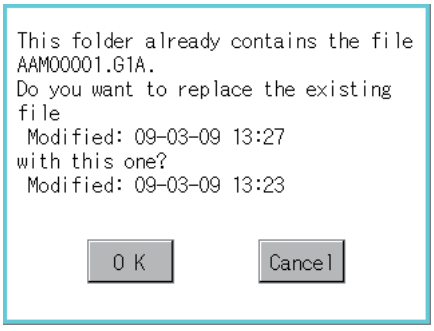
Copies the selected file.



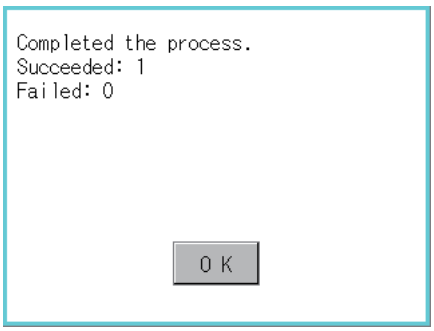
1. Touch the check box of the file to copy to select the file.
2. If touch [Copy] button, the message [Please select a destination.] is displayed in the left bottom of the screen.
3. If the copy destination folder is touched, the screen display is changed to the folder of copy destination.
   At this time, it cannot be copied into the same folder where the file exists.
   Select other folders.



4. If touch [Exec] button, the following dialog box shown left is displayed.



5. Touch [OK] button.
   If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
   If touch the [OK] button, overwrites the file.
   If touch [Cancel] button, cancels to copy.



6. When the copy is completed, the dialog box of completion is displayed.
   If touch [OK] button, closes the dialog box.

(5) Graph operation

Displays the selected extended alarm log file in a graph.

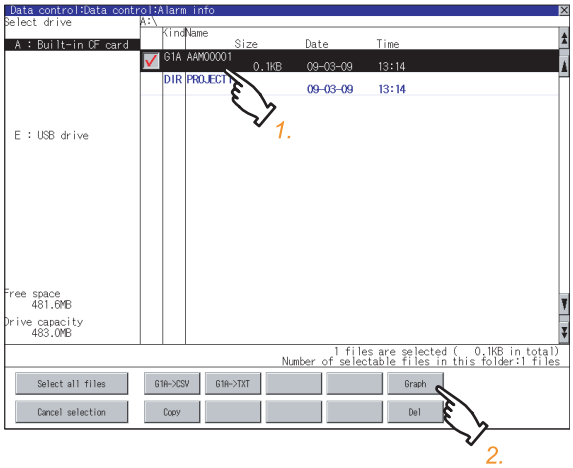
When the extended alarm watch (advanced user alarm, advanced system alarm) is set in history mode, the selected extended alarm log file is displayed in historical graph ((a) Historical graph display).

When set in accumulation mode, displayed it in tally graph ((b) Tally graph display).

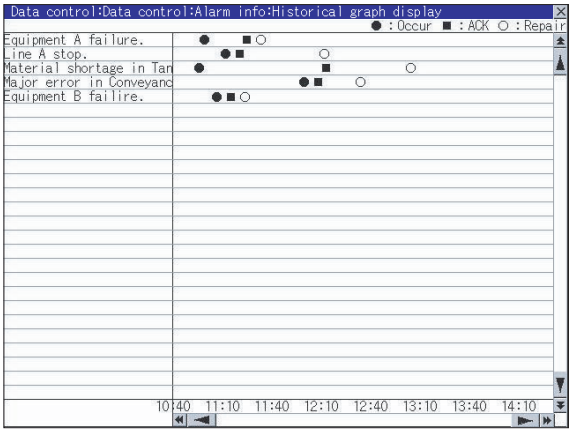
Refer to the following for details related to setting of the extended alarm watch.

•GT Designer3 Version1 Screen Design Manual (Functions) (10 ALARM)

•GT Designer2 Version☐ Screen Design Manual (8 ALARM)



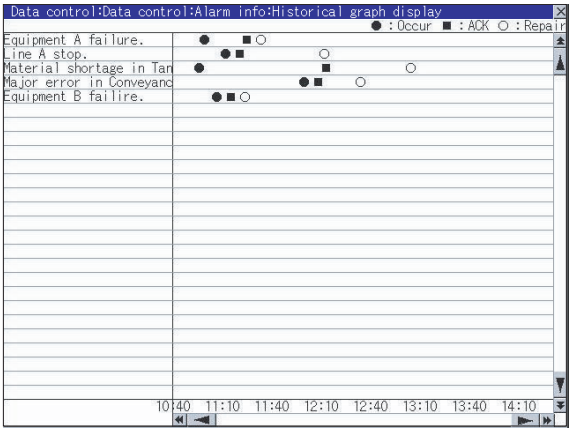
1. Touch the check box of the G1A file to display in a graph, to select the file.
2. If touch [Graph] button, displays the historical graph or tally graph according to the setting of the extended alarm watch.



(Example: Historical graph)

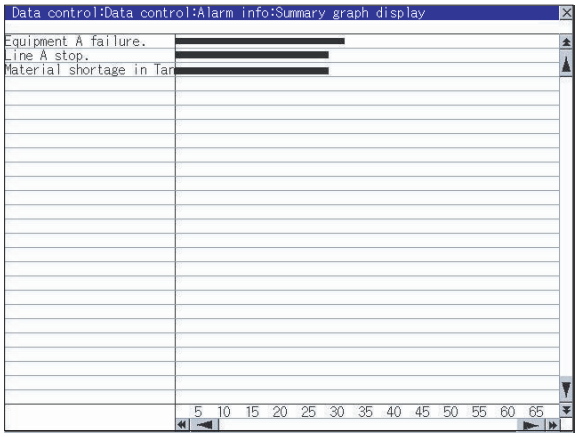
3. When move a graph, operate as follows.
   - If touch ▲ / ▼ button, moves the graph up/down line by line.
   - If touch ⏫ / ⏬ button, moves the graph up/down by one screen.
   - If touch ◀ / ▶ button, moves the graph to left/right by one column.
   - If touch ⏪ / ⏩ button, moves the graph to left/right by one screen.
4. If touch ⊠ button, closes the graph.

(a) Historical graph display



- Displays the generated time (●), confirmed time (■) and restored (○) time of each alarm.
- Displays the time scales by 30 minutes interval in the bottom of the graph.
- The alarms generated in the order of registering alarm are displayed.
- By the name of each alarm, the contents set for the message of the general alarms by GT Designer3 or GT Designer2 are displayed with up to 12 characters of full-size character (up to 24 half-size characters).
  The 13th of full-size character and after (the 25th and after for half-size character) are not displayed.
- The graph displays the alarm within up to 26 lines in one screen.

(b) Tally graph display



- Displays the generated frequency of each alarm by the sideways bar chart.
- By the name of each alarm, the contents set for the message of the general alarms by GT Designer3 or GT Designer2 are displayed with up to 12 characters of full-size character (up to 24 half-size characters).
  The 13th of full-size character and after (the 25th and after for half-size character) are not displayed.
- The graph displays the alarm within up to 26 lines in one screen.

POINT

Graph display

Multiple files cannot be displayed by the graph operation.
When multiple items are selected in the check boxes, the file selected at last in the file list is displayed in a graph.

6.2.2 Advanced recipe information

POINT

Before using advanced recipe information

For writing/reading into/from a controller with this function or editing of advanced recipe file on the personal computer, refer to the following manual.
Specifications and operating procedure are described.

☞ •GT Designer3 Version1 Screen Design Manual (Functions)
(24.3 Advanced Recipe Function)

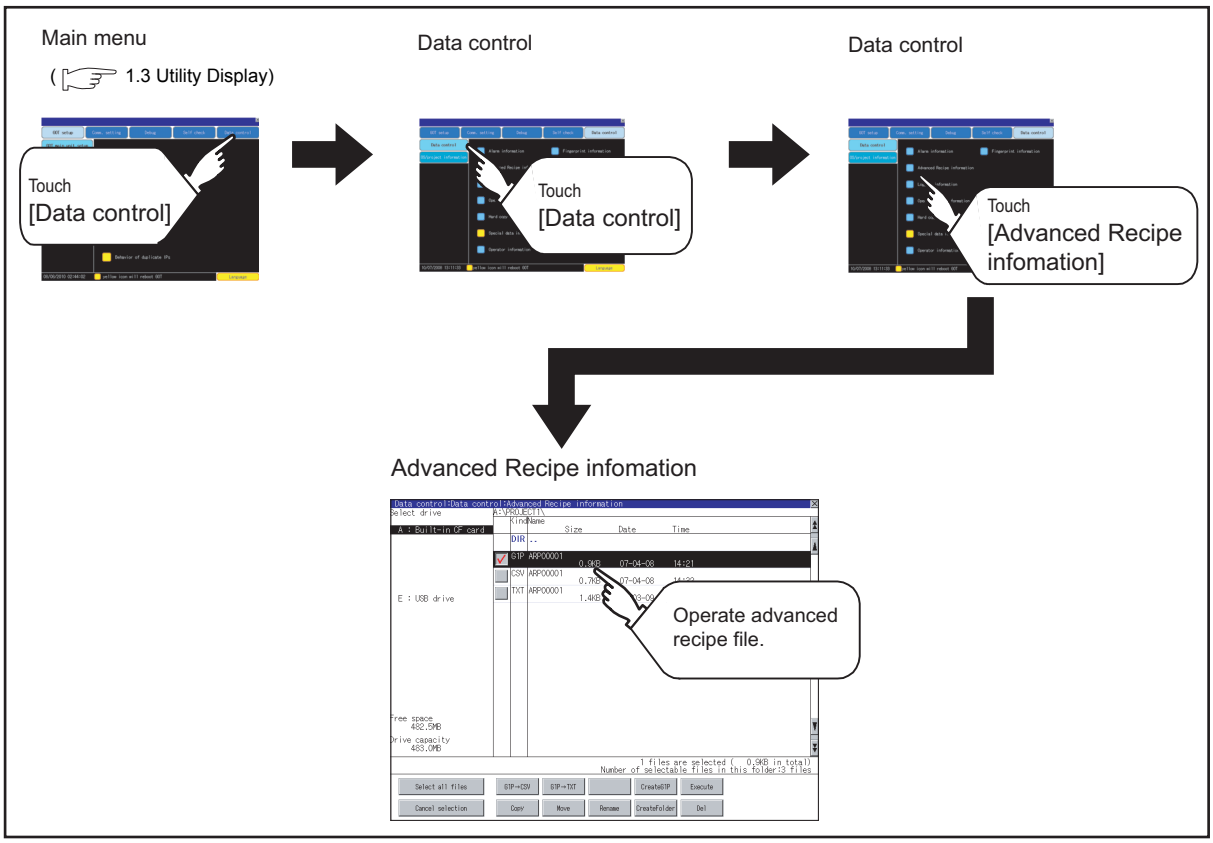
•GT Designer2 Version☐ Screen Design Manual
(12.3 Advanced Recipe Function)

■ Function of advanced recipe information

For the advanced recipe file used in advanced recipe function, copy/delete/file output are available.
In addition, it is possible to writing/reading into/from a controller by using this function, without creating the screen to operate the advanced recipe. (Advanced recipe setting of GT Designer3 or GT Designer2 is required.)

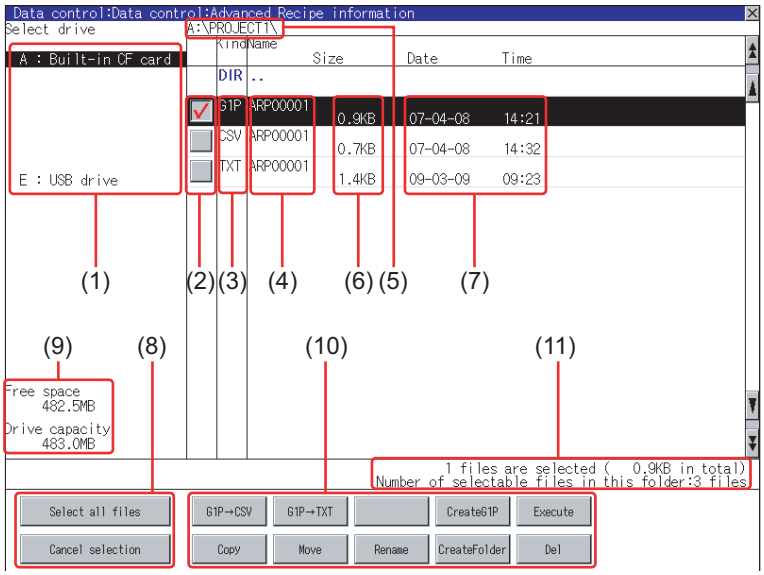
Function		Description	For GT Designer2	For GT Designer3	Reference
Advanced Recipe Information screen	Displaying file, folder data	The file/folder name, data size and creating date & time are displayed.	○	○	■Example of advanced recipe information display ■Advanced recipe information operation
	G1P → CSV conversion	G1P file of advanced recipe file is converted to CSV file.	○	○	(2) G1P CSV conversion operation, G1P TXT conversion operation
	G1P → TXT conversion	G1P file of advanced recipe file is converted to Unicode text file.	○	○	(2) G1P CSV conversion operation, G1P TXT conversion operation
	CSV/TXT→G1P conversion	CSV file or Unicode text file is converted to G1P file of advanced recipe file.	×	○	(3) CSV/TXTG1P conversion operation
	Del	File or folder is deleted.	○	○	(4) Delete operation
	Copy	File is copied.	○	○	(5) Copy operation
	Move	File is moved.	○	○	(6) Move operation
	Rename	File name is changed.	○	○	(7) Rename operation
	Create Folder	New folder is created.	○	○	(8) Folder create operation
	Create G1P	New G1P file of advanced recipe file is created.	○	○	(9) G1P file create operation
Advanced Recipe Record List screen	Load record GOT → PLC	Selected record value is loaded in the device of controller.	○	○	(10) Record load operation
	Save record PLC → GOT	The device of controller is saved in selected record.	○	○	(11) Record save operation
	Match records GOT → PLC	Selected record is verified to the device value of controller.	○	○	(12) Record match operation
	Delete Device Value	The device value contained in selected record is deleted.	○	○	(13) Device value delete operation

■ Operation of advanced recipe information display



■ Example of advanced recipe information display

(1) Advanced recipe information screen



Number	Item	Description
(1)	Drive	The target drive can be selected. (Even if CF card is not installed, this message appears.)
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. In case of file, displays the extension; in case of folder, displays "DIR".
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the nondisplayed part with the [Rename] button, etc. (☞ (7) Rename operation) After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive/folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Creating date & time	The date and time when each file was created are displayed.
(8)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(9)	Drive size	Displays the used/entire size of drive selected by select drive.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

About the displayed file

The files other than that for advanced recipe are not displayed on the advanced recipe information screen.

HINT

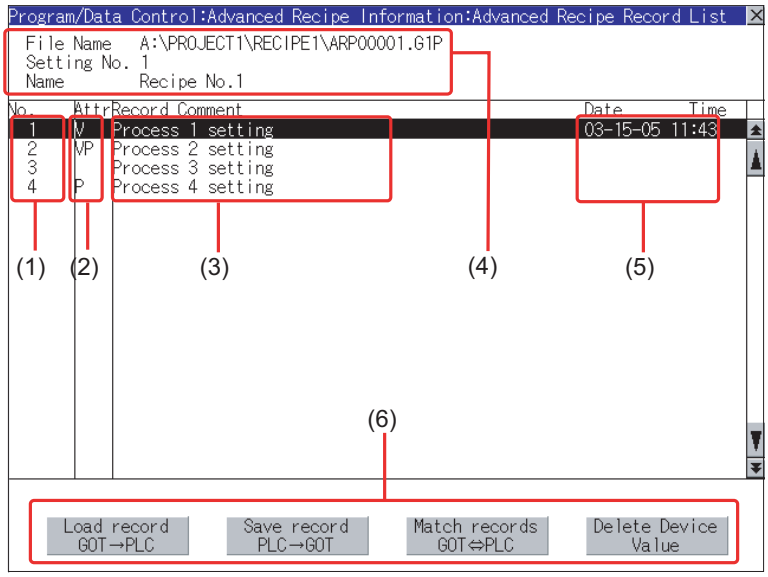
Folders and files displayed

For the folders and files displayed, refer to the following.

☞ 6.1.4 Display file

(2) Advanced recipe record list screen

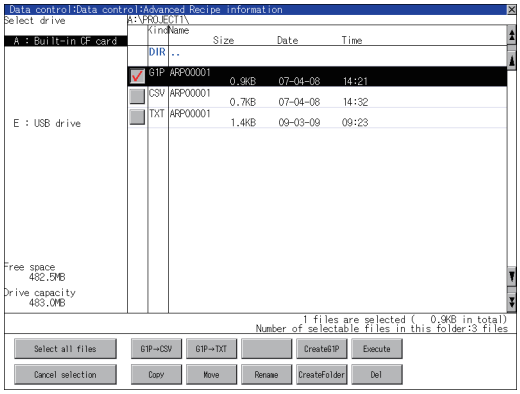
(1) Touching the [Execute] button on the advanced recipe information screen after selecting the advanced recipe file, this screen appears.
Records selected in each advanced recipe file can be displayed or saved/loaded.



Number	Item	Description
(1)	No.	Record No. of advanced recipe file is displayed.
(2)	Attr	Attribution of record is displayed. Attribution of record can be changed with GT Designer3 or GT Designer2. V : Record can be loaded/saved (Record whose value is selected.) VP : Record only for loading (Record whose value is selected and cannot be changed.) Blanc : Record only for saving (Record whose value is deleted or not selected.) P : Record unusable (reserved area) (Record whose value is not selected and cannot be changed.)
(3)	Record Comment	Record Comment is displayed.
(4)	File Name	Path and name of recipe file are displayed.
	Setting No.	Recipe No. is displayed.
	Name	Recipe name is displayed.
(5)	Date and time	Date and time when record comment is updated are displayed.
(6)	Operating switch	Execution switch of each function.

■ Advanced recipe information operation

(1) Display operation of advanced recipe information



1. If touch a drive of select drive, the information of the touched drive is displayed.
2. If touch a folder name, the information of the touched folder is displayed.
3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.
4. If touch ▲▼ button of the scrollbar, the screen scrolls up/down by one line.
   If touch ⏫⏬ button, the screen scrolls up/down by one screen.
5. Touch a check box to select the file.
6. For operation of operating switches, refer to the following.
   G1A → CSV ,
   G1A → TXT..... ☞(2) G1P CSV conversion operation, G1P TXT conversion operation

   Delete..... ☞ (4) Delete operation

   Copy..... ☞ (5) Copy operation

   Move..... ☞ (6) Move operation

   Rename..... ☞ (7) Rename operation

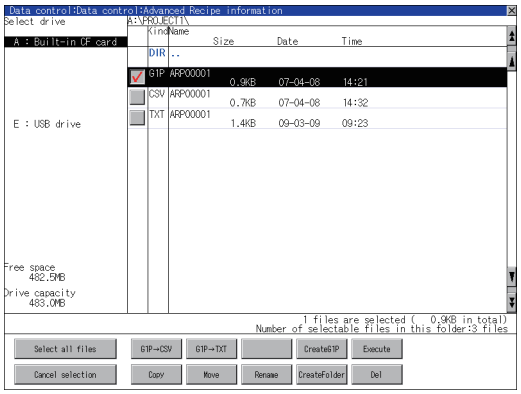
   Create Folder..... ☞ (8) Folder create operation

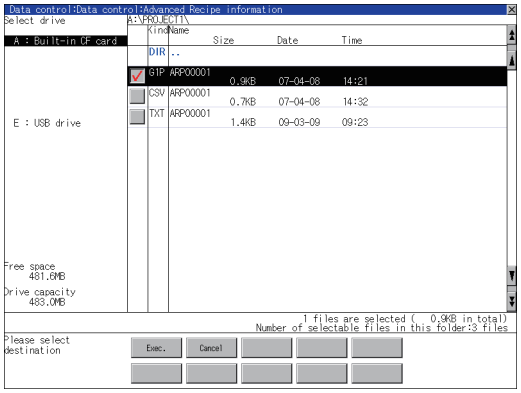
   Create G1P..... ☞ (9) G1P file create operation

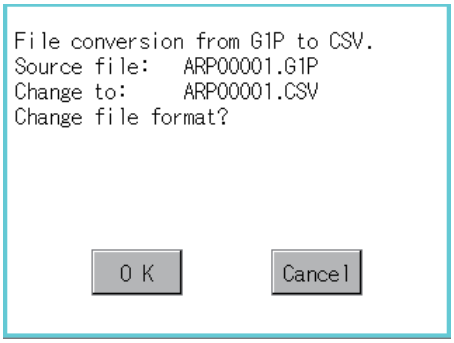
   Execute..... ☞ (10) Record load operation to (13) Device value delete operation
7. If touch ☒ button, the screen is closed.

(2) G1P → CSV conversion operation, G1P → TXT conversion operation

Advanced recipe file (G1P file) is converted to CSV file or Unicode text file that can be displayed/edited on personal computer.







(Example: Dialog box if the [G1P → CSV] button is touched.)

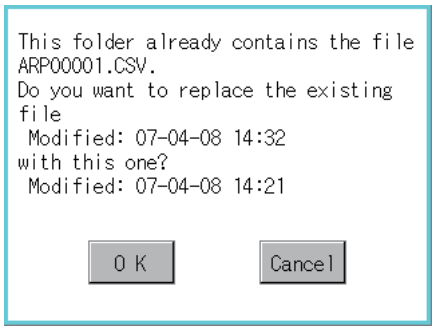
(Continued to next page)

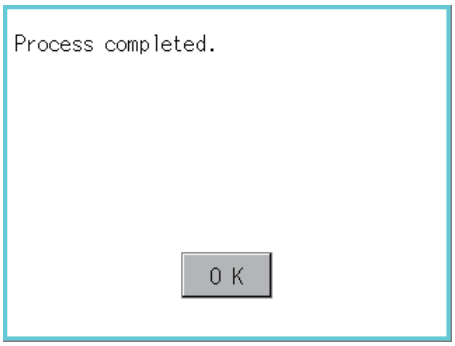
1. Touch the check box of the G1P file which is to be converted to a CSV file or Unicode text file to select the file.

2. Touch the following button in accordance with destination file type.
   - CSV file : [G1P → CSV] button
   - Unicode text file : [G1P → TXT] button

3. Select the target folder.
   (Selecting a folder is not needed for outputting directly below the drive.)

4. If touch the [Exec] button, the dialog box shown left is displayed.
   Touch the [OK] button.
   (While executing, "Processing..." message appears on the screen.)



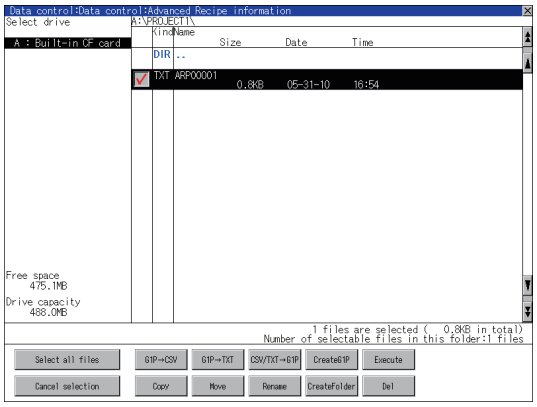


5. When the file, whose name is the same, exists in the destination folder, the dialog box shown left appears without starting the conversion. If touch the [OK] button, overwrites the file.
If touch [Cancel] button, cancels the conversion.

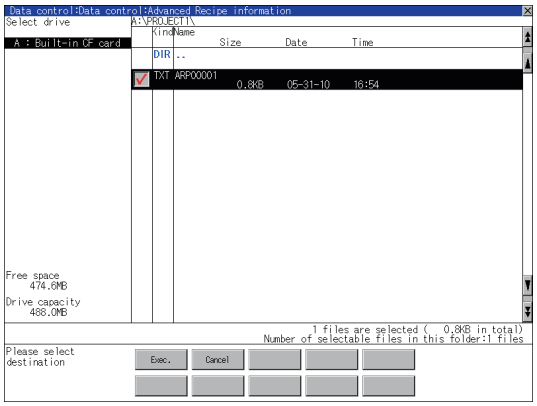
6. The message of completion is displayed in dialog box when conversion is completed.
If touch [OK] button, the dialog box is closed.

(3) CSV/TXT→G1P conversion operation

CSV file or Unicode text file is converted to an advanced recipe file (G1P file).

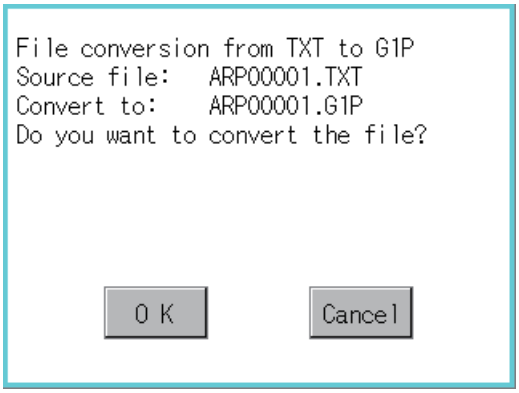


1. To select the file, touch the check box of CSV file or Unicode text file to be converted to a G1P file.



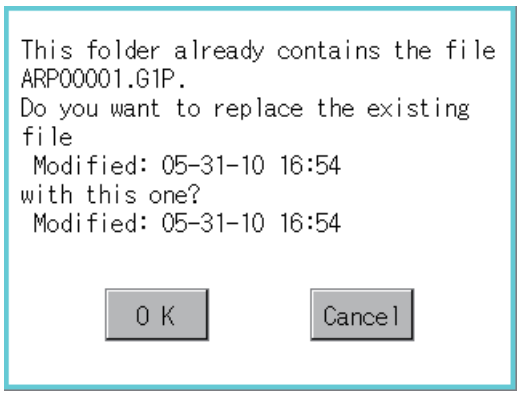
2. Touch the [CSV/TXT → G1P] button to display [Please select destination] at the lower left corner of the screen.

3. Select the target folder.
(Selecting a folder is not needed for outputting directly below the drive.)



4. Touch the [Exec] button to display the dialog box shown left.
Touch the [OK] button.
(While executing, “Processing...” message appears on the screen.)

(Continued to next page)

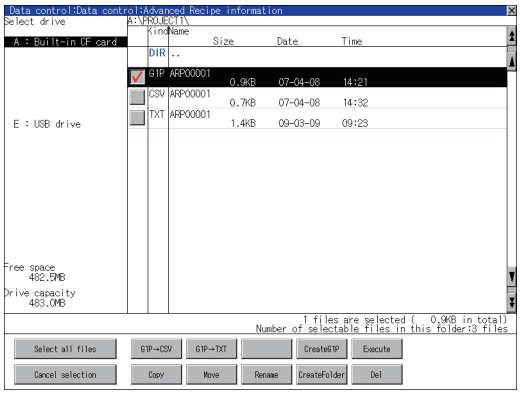


5. When the file, whose name is the same, exists in the destination folder, the dialog box shown left appears without starting the conversion.
To overwrite the file, touch the [OK] button.
To cancel the conversion, touch the [Cancel] button.

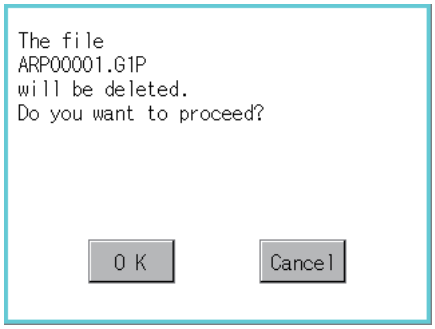
6. The completion message appears in the dialog box when the conversion is completed.
To close the dialog box, touch the [OK] button.

(4) Delete operation

Folder and file to be used on advanced recipe are deleted.

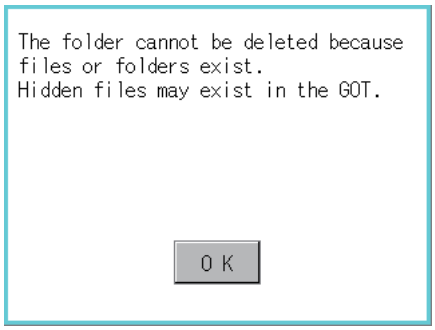


1. Touch the folder to delete or the check box of the file to delete to select the file.



2. If touch [Del] button, the dialog box mentioned left is displayed.
If touch [OK] button, the file/folder is deleted. (While executing, "Processing..." message appears on the screen.)
If touch [Cancel] button, the deletion is canceled.

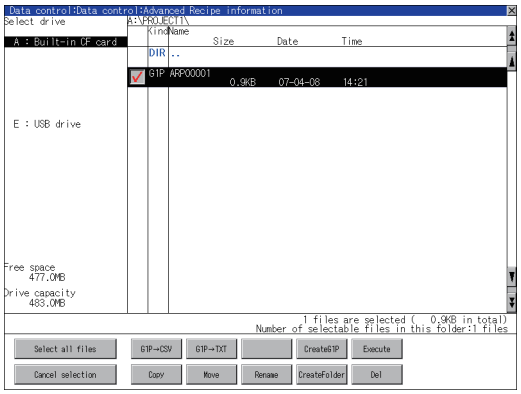
3. When the deletion is completed, the completion dialog box is displayed.
If touch [OK] button, the dialog box is closed.

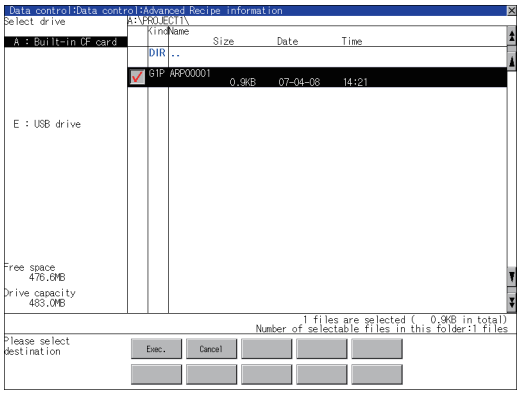


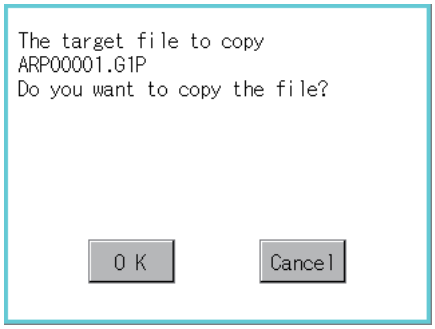
4. When it cannot be deleted, the dialog box showed at left appears. (Only when deleting folder is executed.)
Verify that there is no file in the folder and execute the delete operation again.
(☞ 6.2.3 ■Precautions)

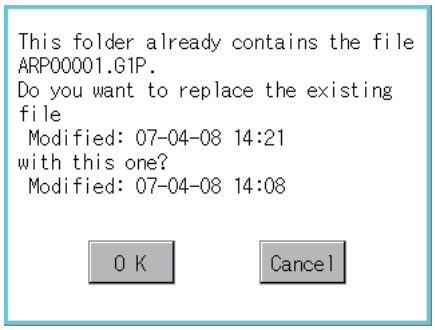
(5) Copy operation

Folder to be used in advanced recipe is copied.



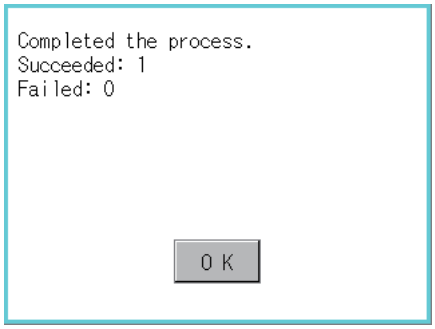






(Continued to next page)

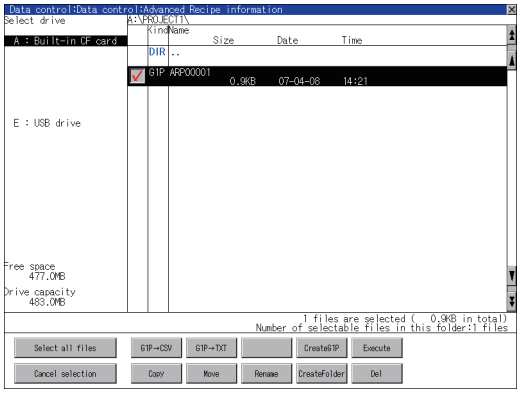
1. Touch the check box of the file to copy to select the file.
2. Touch the [Copy] button.
3. Select the target folder.
   (Selecting a folder is not needed for outputting directly below the drive.)
   At this time, it cannot be copied into the same folder where the file exists.
   Select other folders.
4. If touch [Exec] button, the following dialog box shown left is displayed.
   Touch [OK] button.
   (While executing, "Processing..." message appears on the screen.)
5. If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
   If touch the [OK] button, overwrites the file.
   If touch [Cancel] button, cancels to copy.



6. When the copy is completed, the dialog box of completion is displayed.
If touch [OK] button, closes the dialog box.

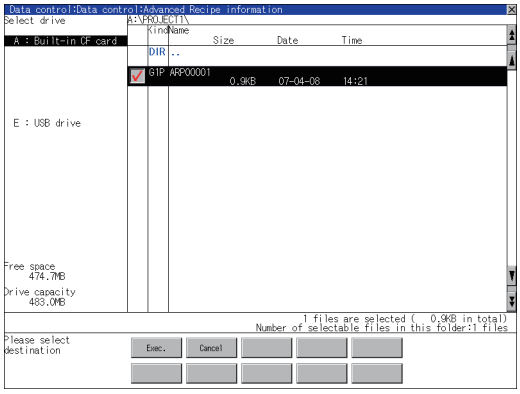
(6) Move operation

Files to be used in advanced recipe are moved.



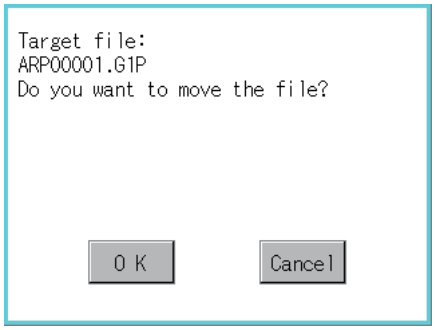
1. Touch the check box of the file to be moved to select the file.

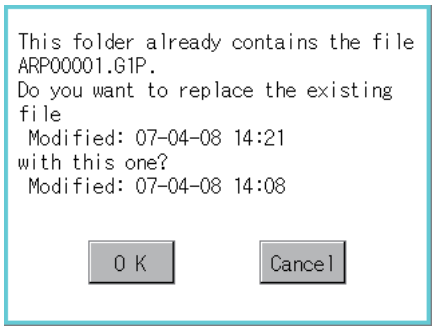
2. Touch the [Move] button.



3. Select the target folder.
(Selecting a folder is not needed for moving directly below the drive.)

(Continued to next page)





4. If touch the [Exec] button, the dialog box shown left is displayed.
Touch the [OK] button.
(While executing, "Processing..." message appears on the screen.)

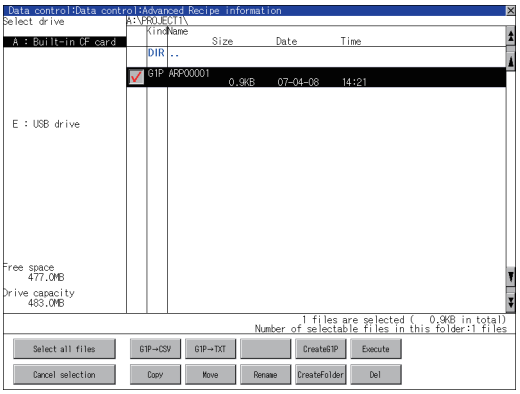
5. When any file with the same name exists in the destination folder, the dialog box shown left appears without starting the movement.
Touching the [OK] button overwrites the file.

If touch the [Cancel] button, cancels moving.

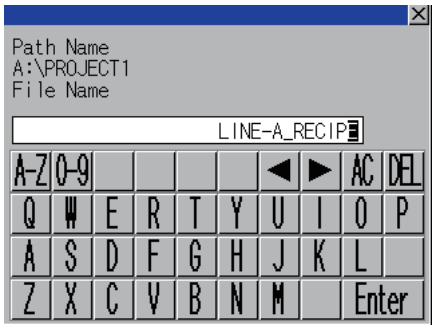
6. When moving is completed, completion dialog box is displayed.
If touch the [OK] button, closes the dialog box.

(7) Rename operation

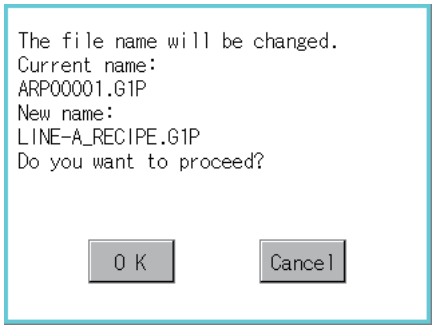
File name to be used in advanced recipe is changed.



1. Select the check box of the file to be renamed by touching.

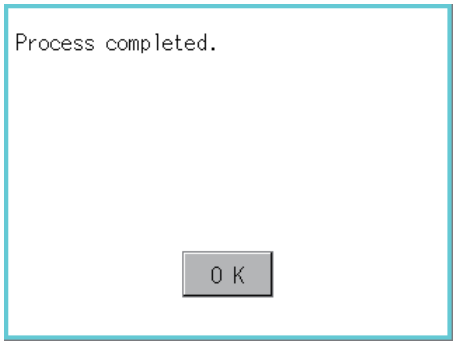


2. If touch the [Rename] button, displays the screen shown left, then input the file name to be renamed.
   By touching the following button, input text type is changed.
   [A-Z]: English capital
   [0-9]: Numeric/Symbol



3. If touch the [Enter] button, displays the dialog box shown left.

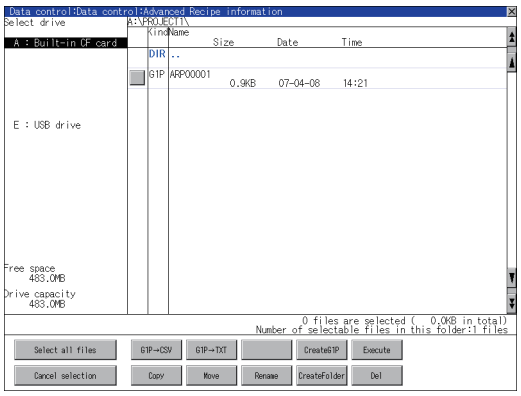
4. If touch the [OK] button, starts renaming file. (While executing, "Processing..." message appears on the screen.)



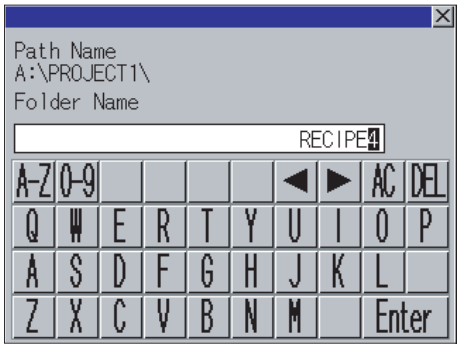
5. When renaming is completed, completion dialog box is displayed.
   If touch the [OK] button, closes the dialog box.

(8) Folder create operation

Folder to be used in advanced recipe is created.



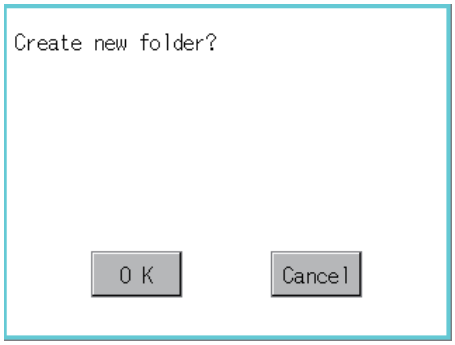
1. Touch the [Create Folder] button.



2. The input key window shown left appears, then input the file name to be created.
By touching the following button, input text type is changed.

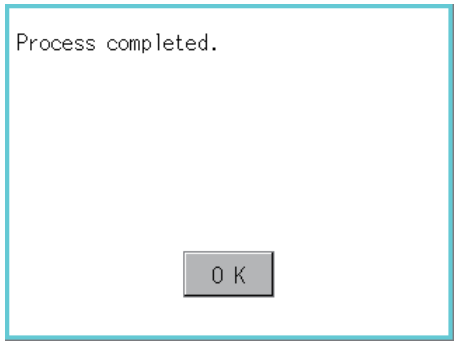
[A-Z]: English capital

[0-9]: Numeric/Symbol



3. If touch the [Enter] button, displays the dialog box shown left.

4. If touch the [OK] button, starts creating folder.

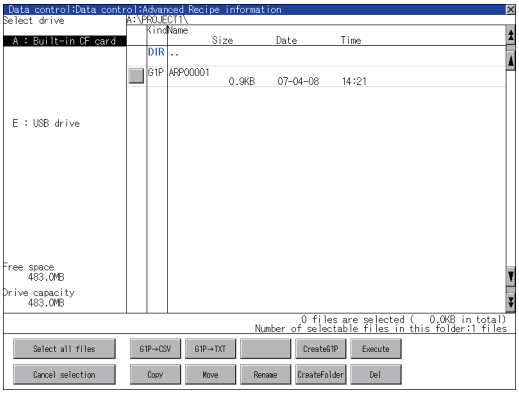


5. When creating folder is completed, completion dialog box is displayed.
If touch the [OK] button, closes the dialog box.

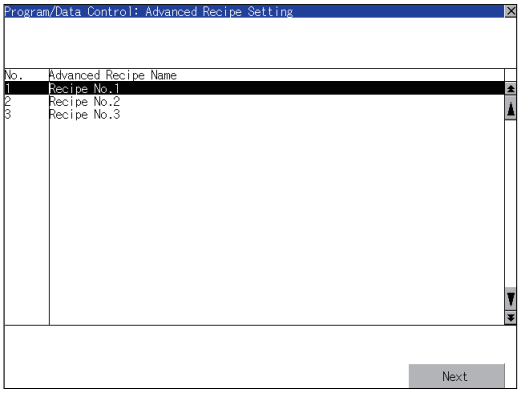
(9) G1P file create operation

Advanced recipe file (G1P file) is created.

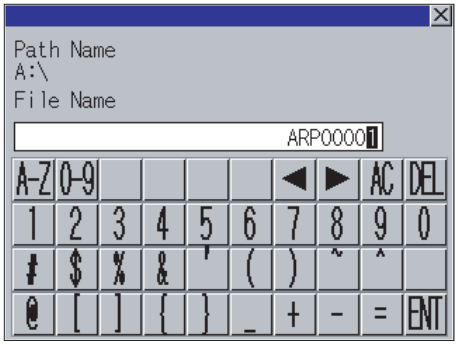
When advanced recipe is only executed on Utility, advanced recipe file should be created with this function in advance.



1. Touch the [Create G1P] button.



2. The screen to select the advanced recipe setting is displayed.
Select the advanced recipe setting to be used for new file.
After selecting, touch the [Next] button.

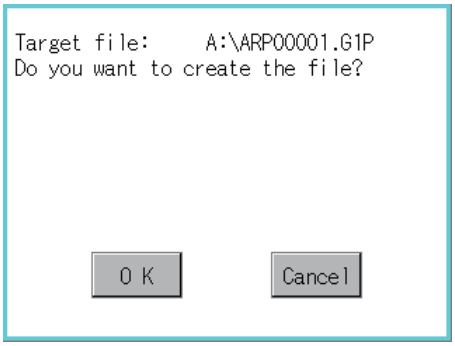


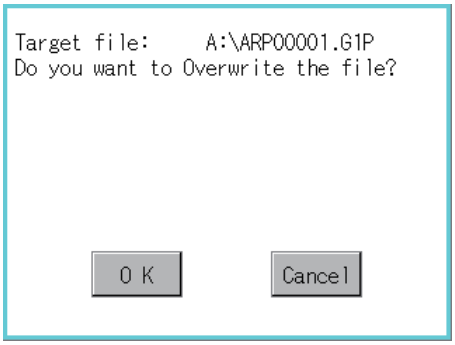
3. As the input key window is displayed, input the file name for new file.
By touching the following button, input text type is changed.

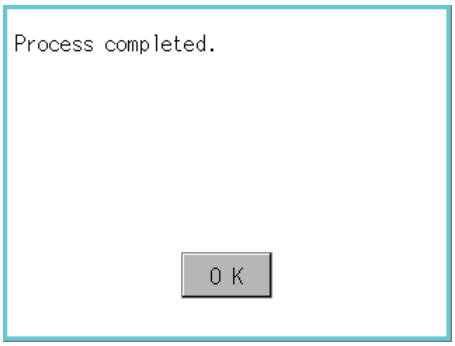
[A-Z]: English capital

[0-9]: Numeric/Symbol

(Continued to next page)







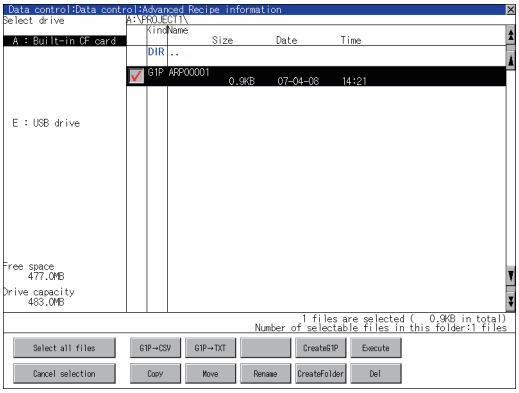
4. If touch the [Enter] button, the dialog box shown left is displayed.
Touch the [OK] button.

5. When the file, whose name is the same, exists in the destination folder, the dialog box shown left appears without starting the creation.
Touching the [OK] button overwrites the file.
If touch the [Cancel] button, cancels creating.

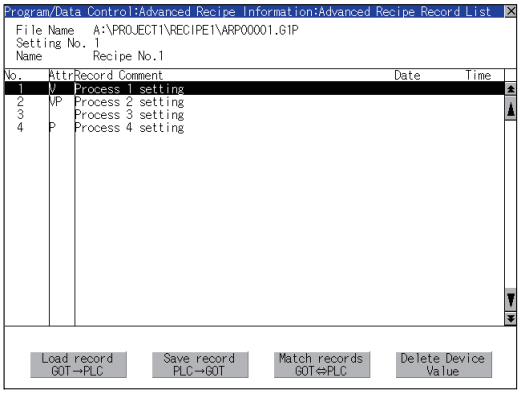
6. When creating is completed, completion dialog box is displayed.
If touch the [OK] button, closes the dialog box.

(10) Record load operation

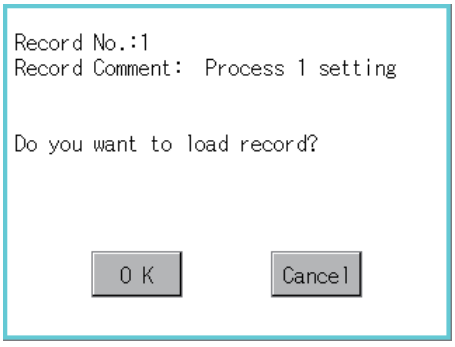
Selected record value is loaded in the device of controller.



1. Touch the check box of the recipe file to select the file.
   Touch the [Execute] button.

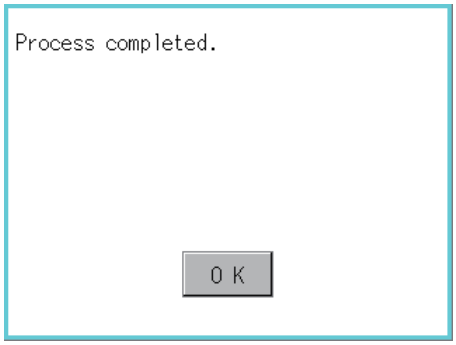


2. As the Advanced Recipe Record List screen is displayed, select the record comment to which you want to load the device value.



3. If touch the [Load record GOT→PLC] button, the dialog box shown left is displayed.

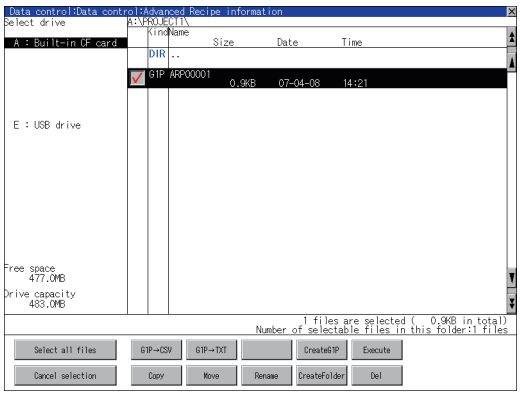
4. If touch the [OK] button, starts loading record.



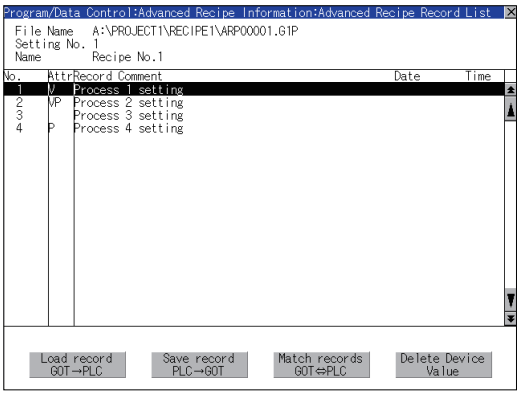
5. When loading is completed, completion dialog box is displayed.
   If touch the [OK] button, closes the dialog box.

(11) Record save operation

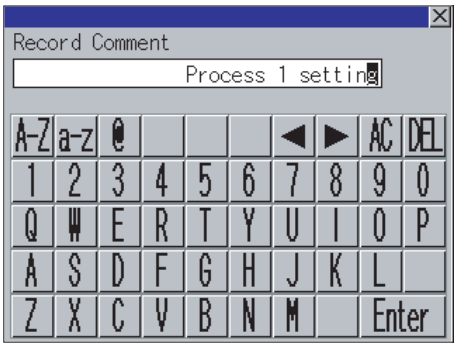
Device value of a controller is saved in the selected record.



1. Touch the check box of the recipe file to select the file.
   Touch the [Execute] button.



2. As the Advanced Recipe Record List screen is displayed, select the record comment for saving the device value.



3. If touch the [Save record PLC→GOT] button, the screen shown left is displayed.
   For changing the record comment of saving destination, input the record comment.
   By touching the following button, input text type is changed.

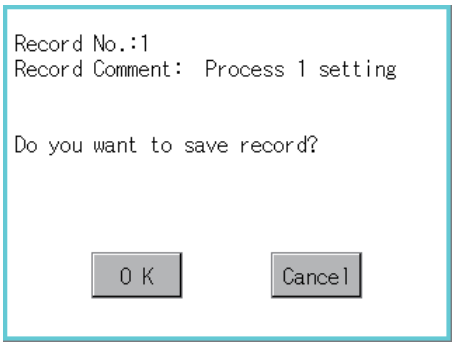
   [A-Z]: English capital

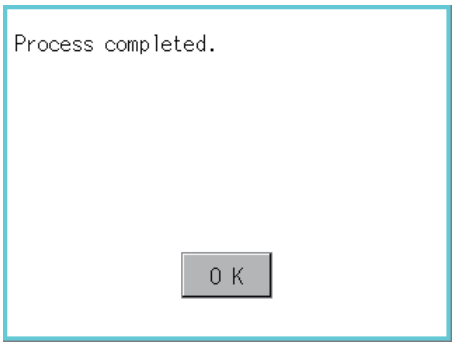
   [a-z]: English minuscule

   [0-9]: Numeric/Symbol

   Other than alphanumeric and symbol can not be inputted.
   If record comment is not changed, it is not need to input.

(Continued to next page)





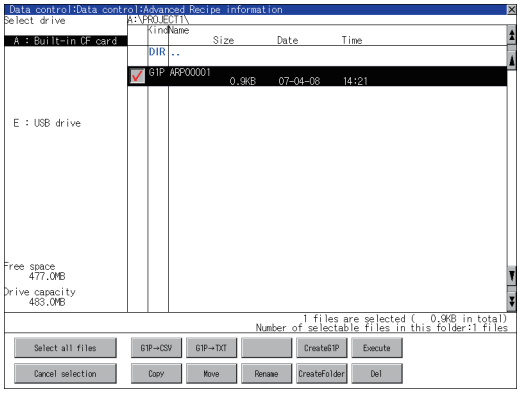
4. If touch the [Enter] button, the dialog box shown left is displayed.

5. If touch the [OK] button, starts saving record.

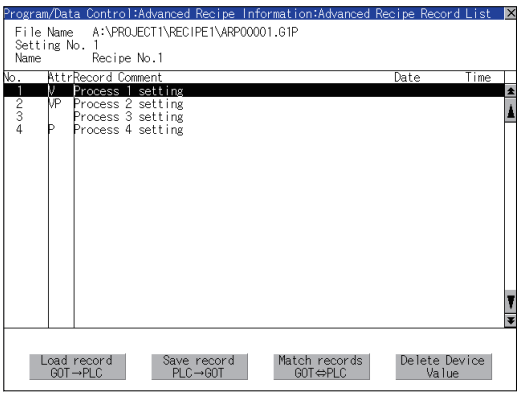
6. When saving is completed, completion dialog box is displayed.
If touch the [OK] button, closes the dialog box.

(12) Record match operation

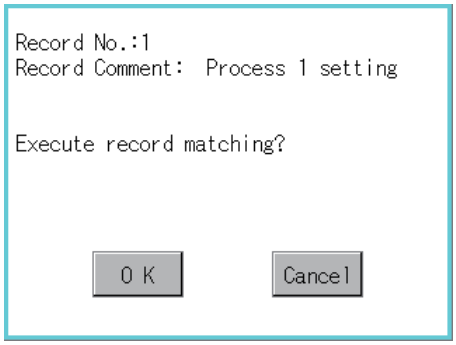
Verifies weather selected record matches to the device value of the controller.
After executing loading/saving with advanced recipe, verifies weather its contents are reflected.



1. Touch the check box of the recipe file to select the file.
   Touch the [Execute] button.

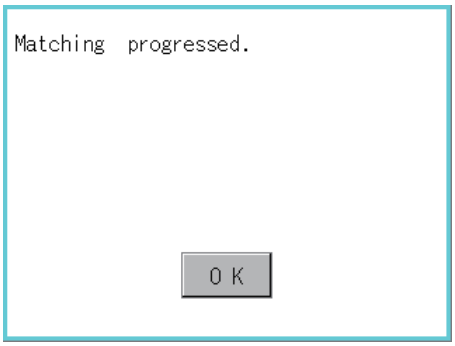


2. As the Advanced Recipe Record List screen is displayed, select the record comment for matching the device value.

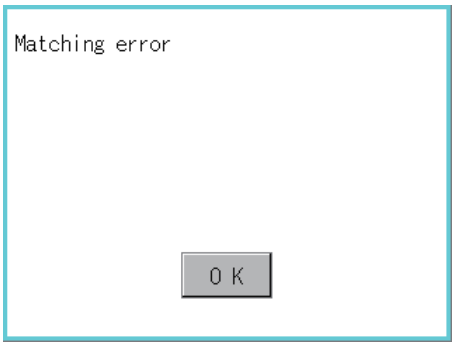


3. If touch the Match records GOT↔PLC button, dialog box shown left is displayed.
4. If touch the [OK] button, starts matching record.

(Continued to the next page)



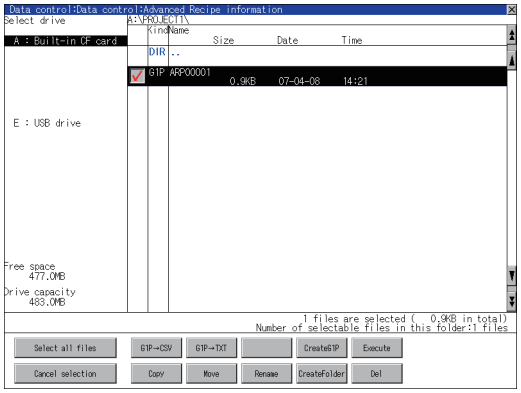
5. When matching is completed, completion dialog box is displayed.
If touch the [OK] button, closes the dialog box.



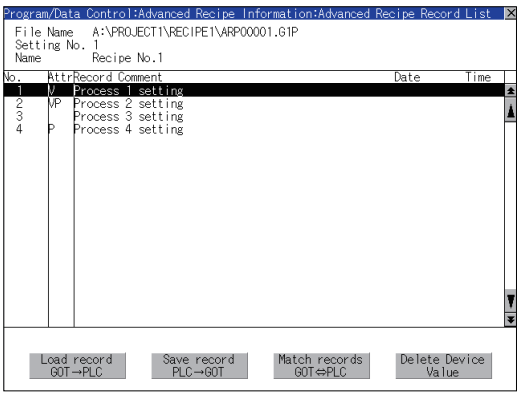
6. If selected record does not match to the device value of controller, the dialog box shown left is displayed.

(13) Device value delete operation

The device value of selected record is deleted (without value) and changed to record only for reading. (The record name is not deleted.)



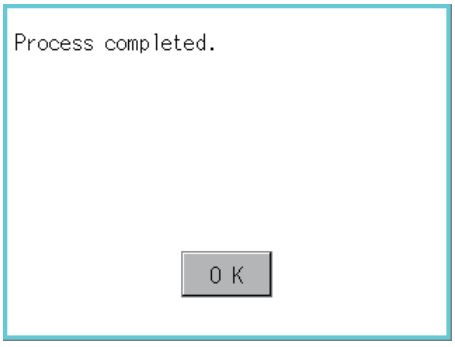
1. Touch the check box of the recipe file to select the file.
   Touch the [Execute] button.



2. As the Advanced Recipe Record List screen is displayed, select the record comment to be deleted.
   (If the data of which attribution contains "P" can not be deleted.)

3. If touch the [Delete Dvice Value] button, the dialog box shown left is displayed.

4. If touch the [OK] button, starts deleting device value.
   (The "Processing..." message is displayed on the screen.)



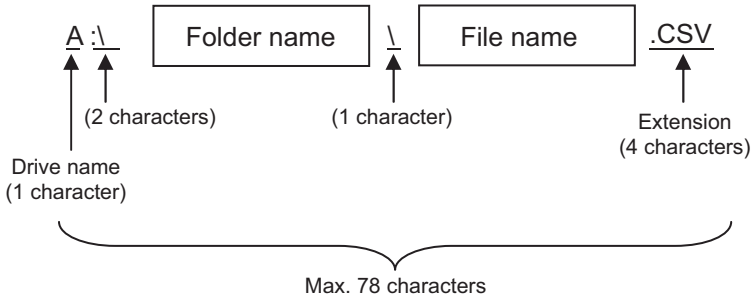
5. When deleting is completed, completion dialog box is displayed.
   If touch the [OK] button, closes the dialog box.

■ Precautions

(1) When creating folder/file

(a) Number of characters set for folder or file name when creating folder/file.
GOT recognizes file location according to path explained below.
Specify folder or file name, and total characters of path cannot exceed 78 characters.
Users only can rename folder or file name.
(Other than folder/file name is automatically printed.)

Example: CSV file Path in CF card or USB memory



HINT

If folder is assigned the hierarchy.
The \ mark is displayed between folder name and folder name, folder name and file name.
The \ mark is also counted as one character.

(b) Character strings that cannot be set to folder/file
The following character strings cannot be used as a folder name or a file name. Even small characters of those cannot be used.

- COM1 to COM9
- LPT1 to LPT9
- AUX
- CON
- NUL
- PRN
- CLOCK$

In addition, the folder/file name showed below cannot be used.

- The folder name which begins with G1.
- Folder name and file name which begin with . (period).
- Folder name and file name which finish with . (period).
- Folder name and file name which have only . (one period) or ..(two periods).

(c) For deleting the folder
The folder in which the file exists cannot be deleted.
Delete the folder after having deleted the files.
In addition, on the advanced recipe information screen, the file other than that for advanced recipe is not displayed on GOT.
When the folder, in which there is no file displayed on the screen, cannot be deleted, confirm whether there is other file in CF card or USB memory by using personal computer, etc.

(2) Precautions for operation

(a) Precautions during folder/file operation (Create/Delete/Copy/File output, etc)
Even if CF card access switch has been turned OFF while GOT is processing folders and files, the processing continues to be executed.
(Example: Even if CF card access switch has been turned OFF while GOT is creating a folder, the folder is created.)
Therefore, do not pull out the CF card while the "Processing..." message is on the screen after CF card access switch has been turned OFF.

(b) While GOT is accessing to other file (Alarm data, etc)
When folder/file processing for the recipe is excecuted while the GOT is in access to other file (CF card access LED ON), the GOT executes folder/file processing for the Advanced Recipe after the processing for other file has completed.
Therefore, it may take some time to finish the process of advanced recipe folder/file.
(The "Processing..." message is displayed on the screen.)

HINT

Estimation of processing time
The process may take time depending on the setting of advanced recipe file to be operated. (The more number of blocks increases, the longer it takes to process advanced recipe folder/file.)

(Reference value)
Direct connection to QCPU and CPU(device point:32767 points setting, transmission speed: 115200bps)
- When the block setting number to1: about 17 seconds
- When the block setting number to 2048: about 4 minutes

(c) For executing the saving/loading of device value with advanced recipe file which has been moved or whose name has been changed.
Adjust [Recipe File] setting of advanced recipe setting with GT Designer3 or GT Designer2 to file which has been moved or whose name has been changed.
After the setting has been changed, download the advanced recipe setting to GOT.

6.2.3 Logging information

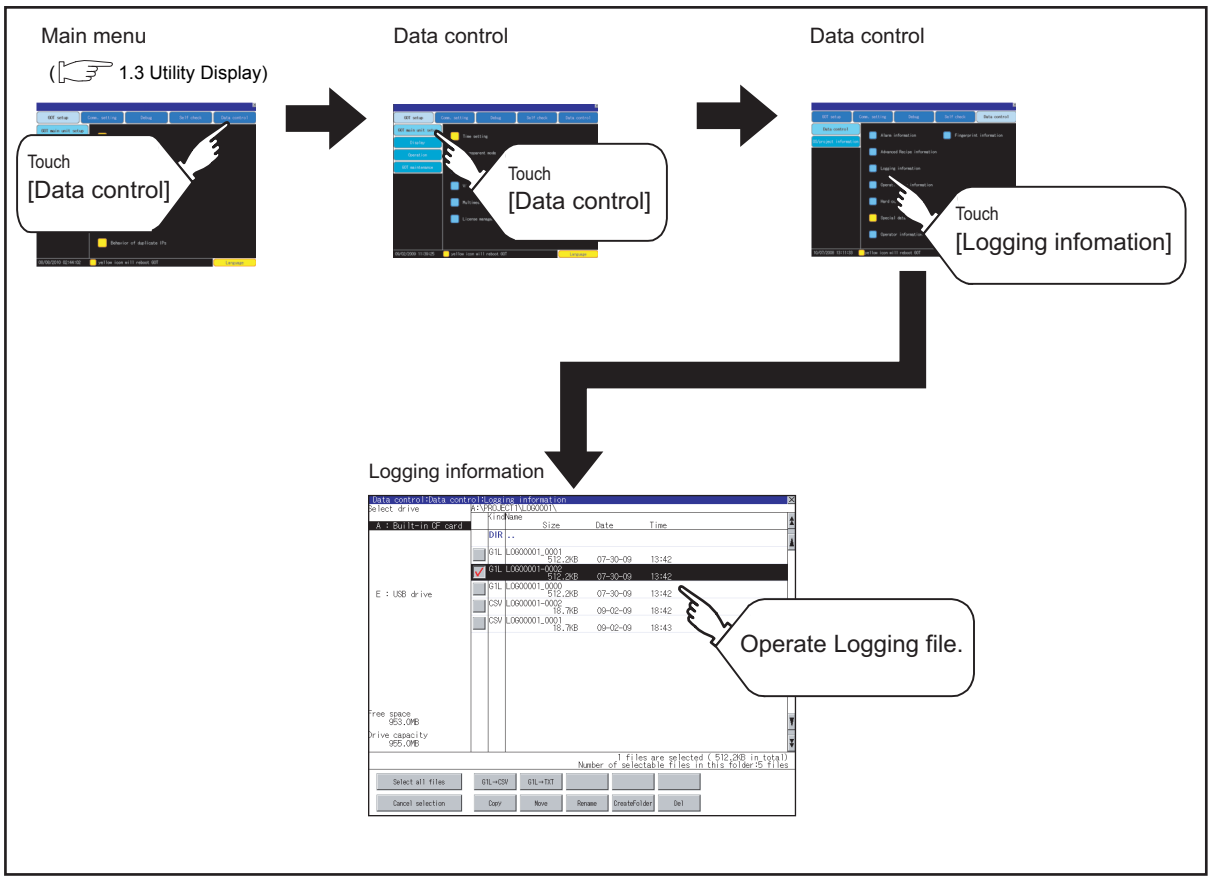
■ Function of logging information

Logging files created with the logging function can be copied, deleted or renamed, etc.
Without using a personal computer, you can manage logging files on the GOT.
For details of the logging function, refer to the following manual.

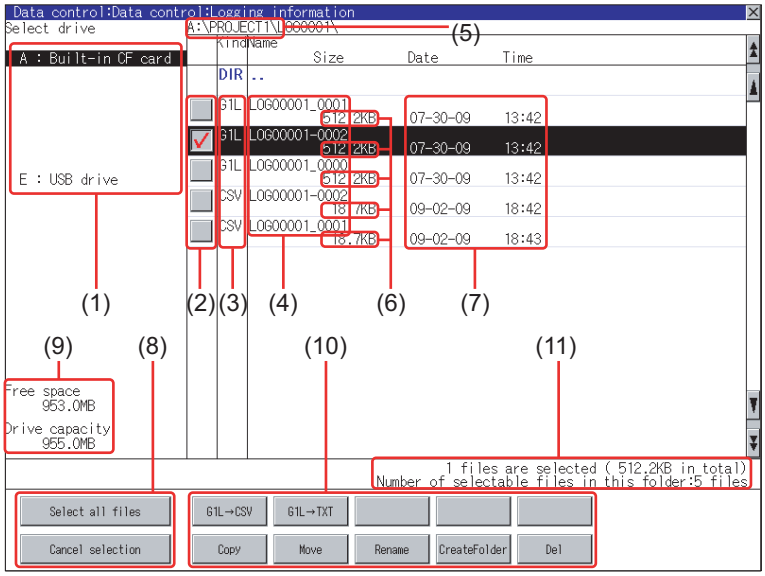
☞ •GT Designer3 Version1 Screen Design Manual (Functions) (23. LOGGING FUNCTION)
•GT Designer2 Version□ Screen Design Manual (11.3 Logging Function)

Function	Description	For GT Designer2	For GT Designer3	Reference
Displaying file, folder data	The file/folder name, data size and creating date & time are displayed.	○	○	■Example of logging information display ■Logging information operation
G1L → CSV conversion	G1L file of logging file is converted to CSV file.	○	○	(2) Operation of G1L CSV conversion, G1L TXT conversion
G1L → TXT conversion	G1L file of logging file is converted to Unicode text file.	○	○	(2) Operation of G1L CSV conversion, G1L TXT conversion
Del	File or folder is deleted.	○	○	(3) Delete operation
Copy	File is copied.	○	○	(4) Copy operation
Move	Folder is moved.	○	○	(5) Move operation
Rename	File name is changed.	○	○	(6) Rename operation
Create Folder	New folder is created.	○	○	(7) Folder create operation

■ Display operation of logging information



■ Example of logging information display



Number	Item	Description
(1)	Drive	The target drive can be selected. (Even if CF card is not installed, this message appears.)
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. In case of file, displays the extension; in case of folder, displays "DIR".
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the nondisplayed part with the [Rename] button, etc. (☞ (6) Rename operation) After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive/folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Creating date & time	The date and time when each file was created are displayed.
(8)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(9)	Drive size	Displays the used/entire size of drive selected by select drive.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

About the displayed file

The files other than that for logging are not displayed on the logging information screen.

HINT

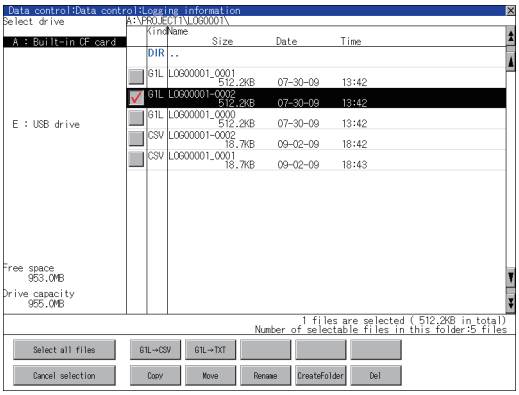
Folders and files displayed

For the folders and files displayed, refer to the following.

☞ 6.1.4 Display file

■ Logging information operation

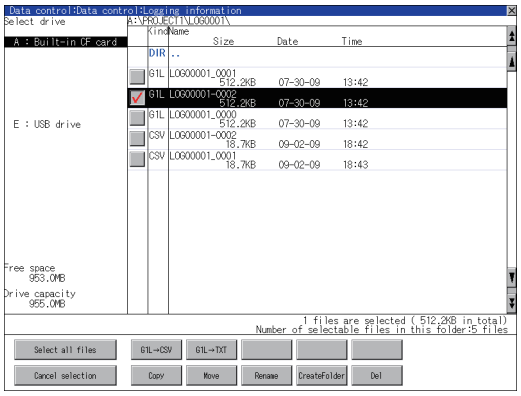
(1) Display operation of logging information

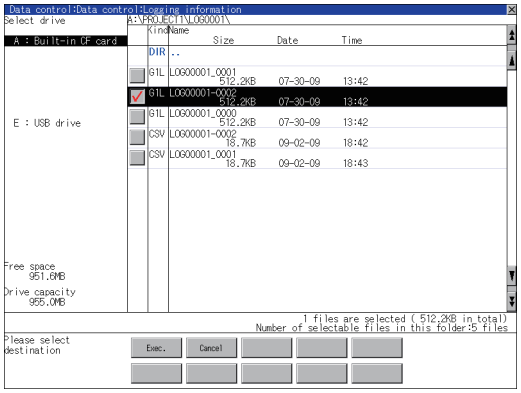


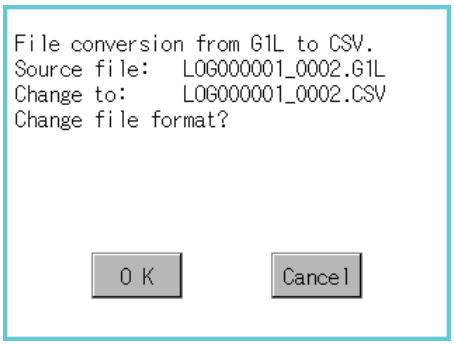
1. If touch a drive of select drive, the information of the touched drive is displayed.
2. If touch a folder name, the information of the touched folder is displayed.
3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.
4. If touch ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.
   If touch ⏫ ⏬ button, the screen scrolls up/down by one screen.
5. Touch a check box to select the file.
6. For operation of operating switches, refer to the following.
   G1L → CSV ,
   G1L → TXT.....☞ (2) Operation of G1L CSV conversion, G1L TXT conversion
   Delete.....☞ (3) Delete operation
   Copy.....☞ (4) Copy operation
   Move.....☞ (5) Move operation
   Rename.....☞ (6) Rename operation
   Create Folder.....☞ (7) Folder create operation
7. If touch ☒ button, the screen is closed.

(2) Operation of G1L → CSV conversion, G1L → TXT conversion

Logging file (G1L file) is converted to CSV file or Unicode text file that can be displayed/edited on personal computer.



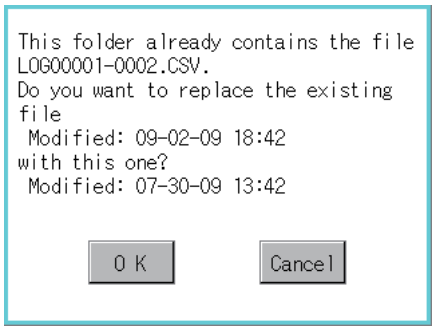




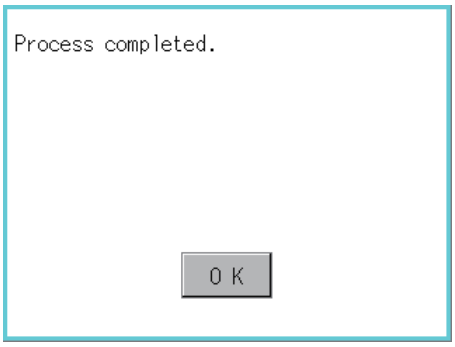
(Example: Dialog box if the [G1L → CSV] button is touched.)

(Continued to next page)

1. Touch the check box of G1L file which is to be converted to CSV file or Unicode text file to select the file.
2. Touch the following button in accordance with destination file type.
   - CSV file : [G1L → CSV] button
   - Unicode text file : [G1L → TXT] button
3. Select the target folder.
   (Selecting a folder is not needed for outputting directly below the drive.)
4. If touch the [Exec] button, the dialog box shown left is displayed.
   Touch the [OK] button.
   (While executing, "Processing..." message appears on the screen.)



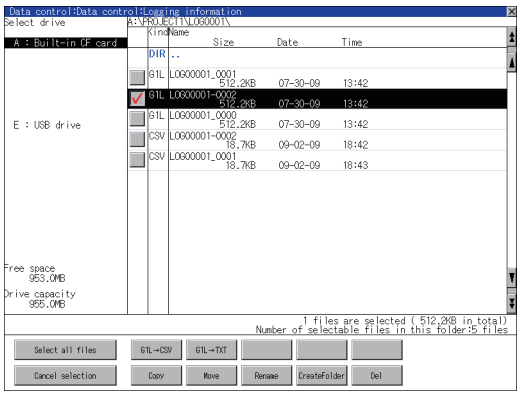
5. When the file, whose name is the same, exists in the destination folder, the dialog box shown left appears without starting the conversion. If touch the [OK] button, overwrites the file.
If touch [Cancel] button, cancels the conversion.



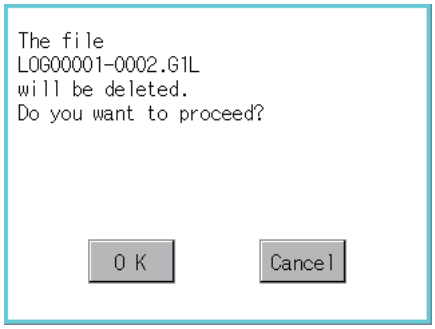
6. The message of completion is displayed in dialog box when conversion is completed.
If touch [OK] button, the dialog box is closed.

(3) Delete operation

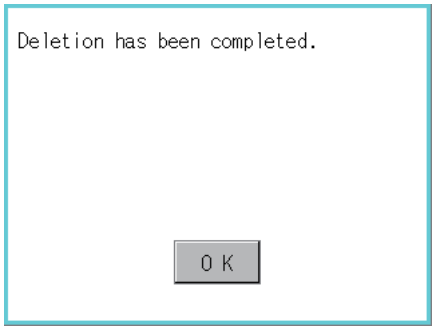
Folder and file to be used on logging are deleted.



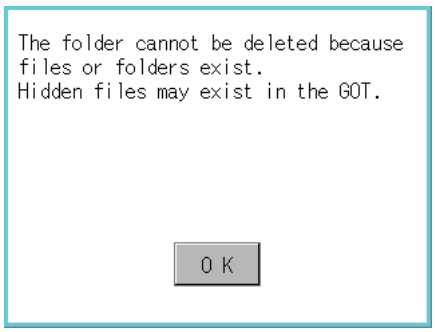
1. Touch the folder to delete or the check box of the file to delete to select the file.



2. If touch [Del] button, the dialog box mentioned left is displayed.
If touch [OK] button, the file/folder is deleted. (While executing, "Processing..." message appears on the screen.)
If touch [Cancel] button, the deletion is canceled.



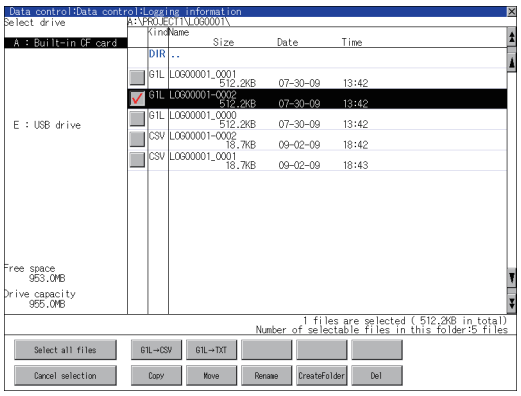
3. When the deletion is completed, the completion dialog box is displayed.
If touch [OK] button, the dialog box is closed.



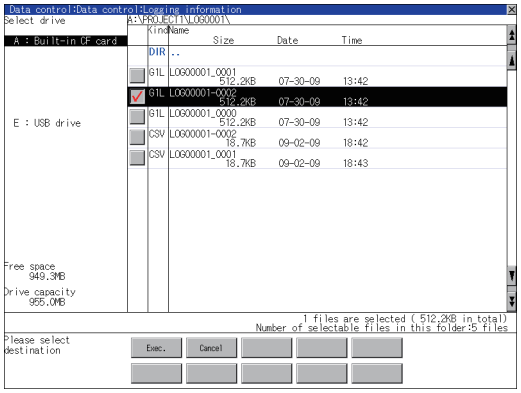
4. When it cannot be deleted, the dialog box showed at left appears. (Only when deleting folder is executed.)
Verify that there is no file in the folder and execute the delete operation again.
(☞ 6.2.3 ■Precautions)

(4) Copy operation

Folder to be used in logging is copied.

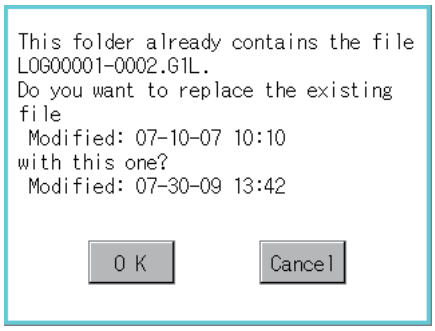


1. Touch the check box of the file to copy to select the file.
2. Touch the [Copy] button.



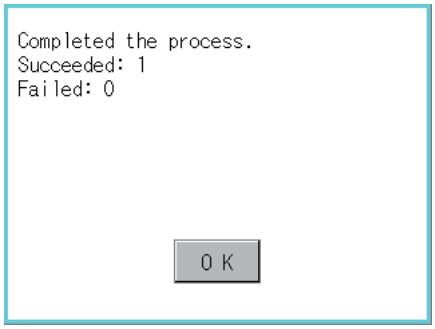
3. Select the target folder.
(Selecting a folder is not needed for outputting directly below the drive.)
At this time, it cannot be copied into the same folder where the file exists.
Select other folders.

4. If touch [Exec] button, the following dialog box shown left is displayed.
Touch [OK] button.
(While executing, "Processing..." message appears on the screen.)



5. If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
If touch the [OK] button, overwrites the file.
If touch [Cancel] button, cancels to copy.

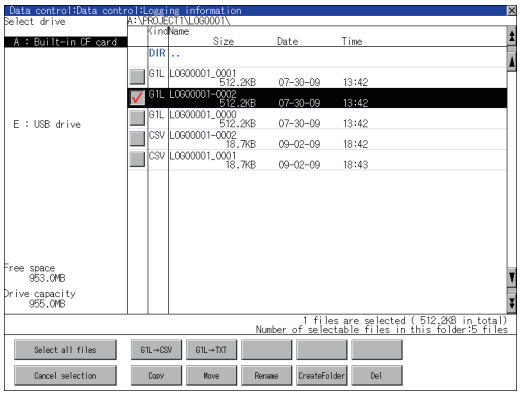
(Continued to next page)



6. When the copy is completed, the dialog box of completion is displayed.
If touch [OK] button, closes the dialog box.

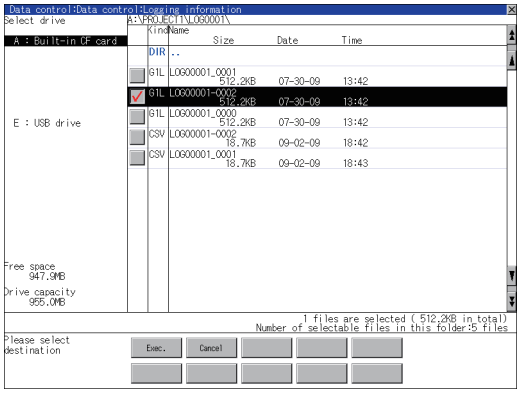
(5) Move operation

An operation log file is moved.



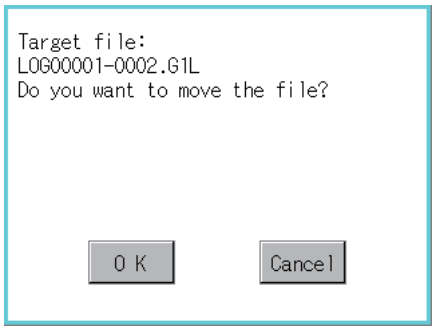
1. Touch the check box of the file to be moved to select the file.

2. Touch the [Move] button.

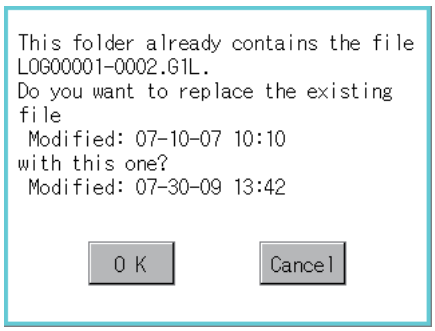


3. Select the target folder.
(Selecting a folder is not needed for moving directly below the drive.)

(Continued to next page)

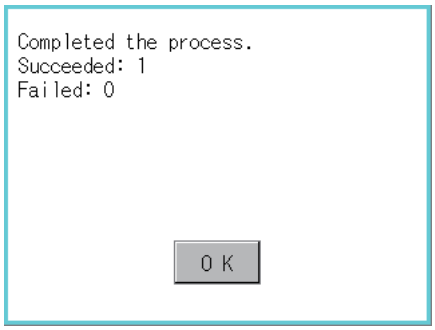


4. If touch the [Exec] button, the dialog box shown left is displayed.
Touch the [OK] button.
(While executing, "Processing..." message appears on the screen.)



5. When only file with the same name exists in the destination folder, the dialog box shown left appears without starting the movement.
Touching the [OK] button overwrites the file.

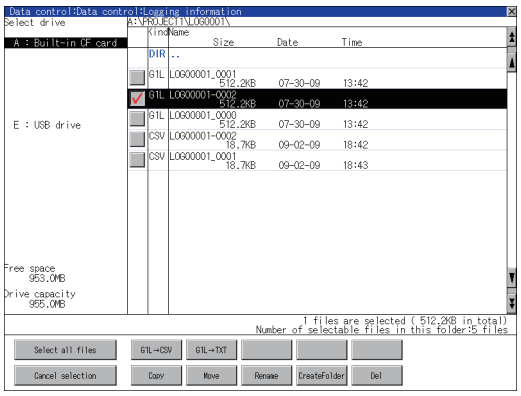
If touch the [Cancel] button, cancels moving.



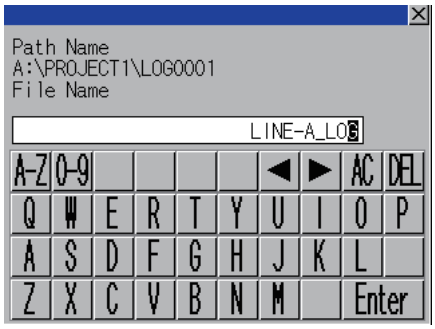
6. When moving is completed, completion dialog box is displayed.
If touch the [OK] button, closes the dialog box.

(6) Rename operation

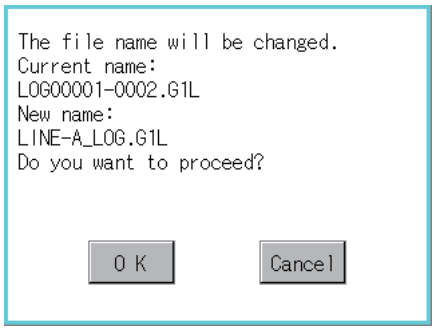
An operation log file is changed.



1. Touch the check box of the file to be renamed, to select the file.

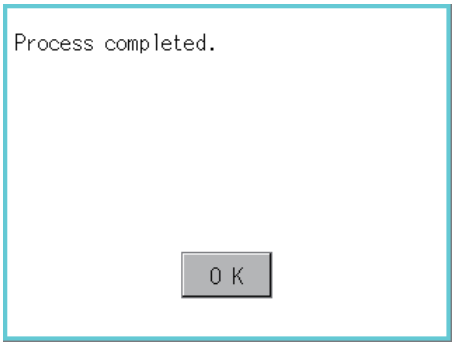


2. If touch the [Rename] button, displays the screen shown left, then input the file name to be renamed.
   By touching the following button, input text type is changed.
   [A-Z]: English capital
   [0-9]: Numeric/Symbol



3. If touch the [Enter] button, displays the dialog box shown left.

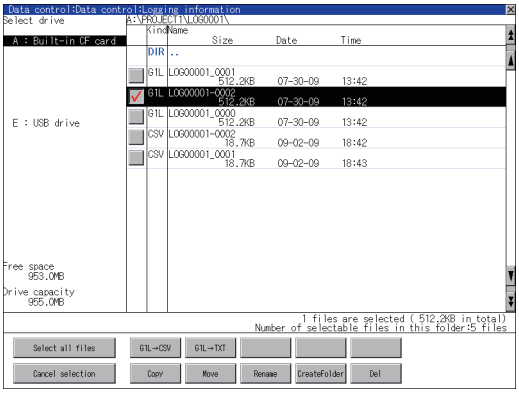
4. If touch the [OK] button, starts renaming file. (While executing, "Processing..." message appears on the screen.)



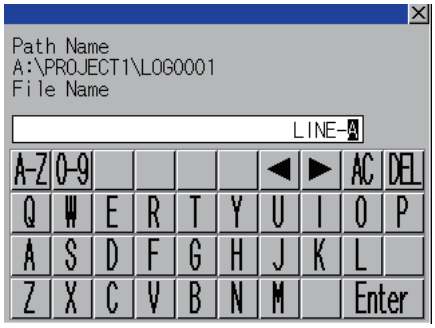
5. When renaming is completed, completion dialog box is displayed.
   If touch the [OK] button, closes the dialog box.

(7) Folder create operation

An operation log folder is created.



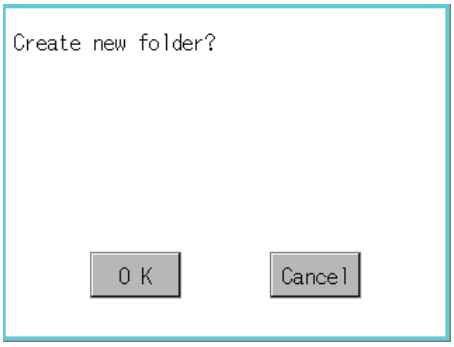
1. Touch the [Create Folder] button.



2. The input key window shown left appears, then input the file name to be created.
   By touching the following button, input text type is changed.

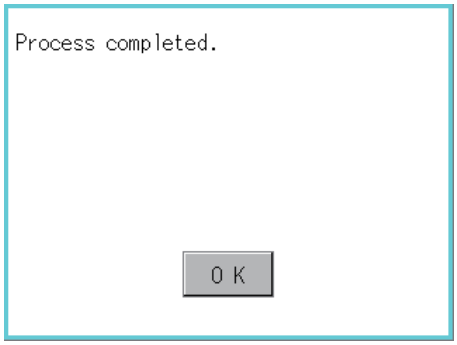
   [A-Z]: English capital

   [0-9]: Numeric/Symbol



3. If touch the [Enter] button, displays the dialog box shown left.

4. If touch the [OK] button, starts creating folder.



5. When creating folder is completed, completion dialog box is displayed.
   If touch the [OK] button, closes the dialog box.

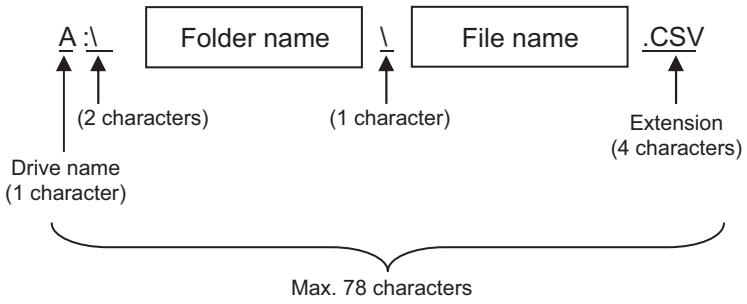
■ Precautions

(1) Precautions for create/delete

(a) When creating folder/file

Number of characters set for folder or file name.
GOT recognizes file location according to path explained below.
Specify folder or file name, and total characters of path cannot exceed 78 characters.
Users only can rename folder or file name.
(Other than folder/file name is automatically printed.)

Example: CSV file Path in CF card or USB memory



HINT

If folder is assigned the hierarchy.
The \ mark is displayed between folder name and folder name, folder name and file name.
The \ mark is also counted as one character.

(b) Character strings that cannot be set to folder/file

The following character strings cannot be used as a folder name or a file name. Even small characters of those cannot be used.

- COM1 to COM9
- LPT1 to LPT9
- AUX
- CON
- NUL
- PRN
- CLOCK$

In addition, the folder/file name showed below cannot be used.

- The folder name which begins with G1.
- Folder name and file name which begin with . (period).
- Folder name and file name which finish with . (period).
- Folder name and file name which have only . (one period) or ..(two periods).

(c) For deleting the folder

The folder in which the file exists cannot be deleted.
Delete the folder after having deleted the files.
In addition, on the logging information screen, the files other than logging files are not displayed on GOT.
When the folder, in which there is no file displayed on the screen, cannot be deleted, confirm whether there is other file in CF card or USB memory by using personal computer, etc.

(2) Precautions for operation

(a) Precautions during folder/file operation (Create/Delete/Copy/File output, etc)
Even if CF card access switch has been turned OFF while GOT is processing folders and files, the processing continues to be executed.
(Example: Even if CF card access switch has been turned OFF while GOT is creating a folder, the folder is created.)
Therefore, do not pull out the CF card while the "Processing..." message is on the screen after CF card access switch has been turned OFF.

(b) While GOT is accessing to other file (Alarm data, etc)
When folder/file processing for the logging is excecuted while the GOT is in access to other files (CF card access LED ON), the GOT executes folder/file processing for the logging after the processing for other files is completed.
Therefore, it may take some time to finish the process of the logging folder/file.
(The "Processing..." message is displayed on the screen.)

6.2.4 Operation log information

■ Function of operation log information

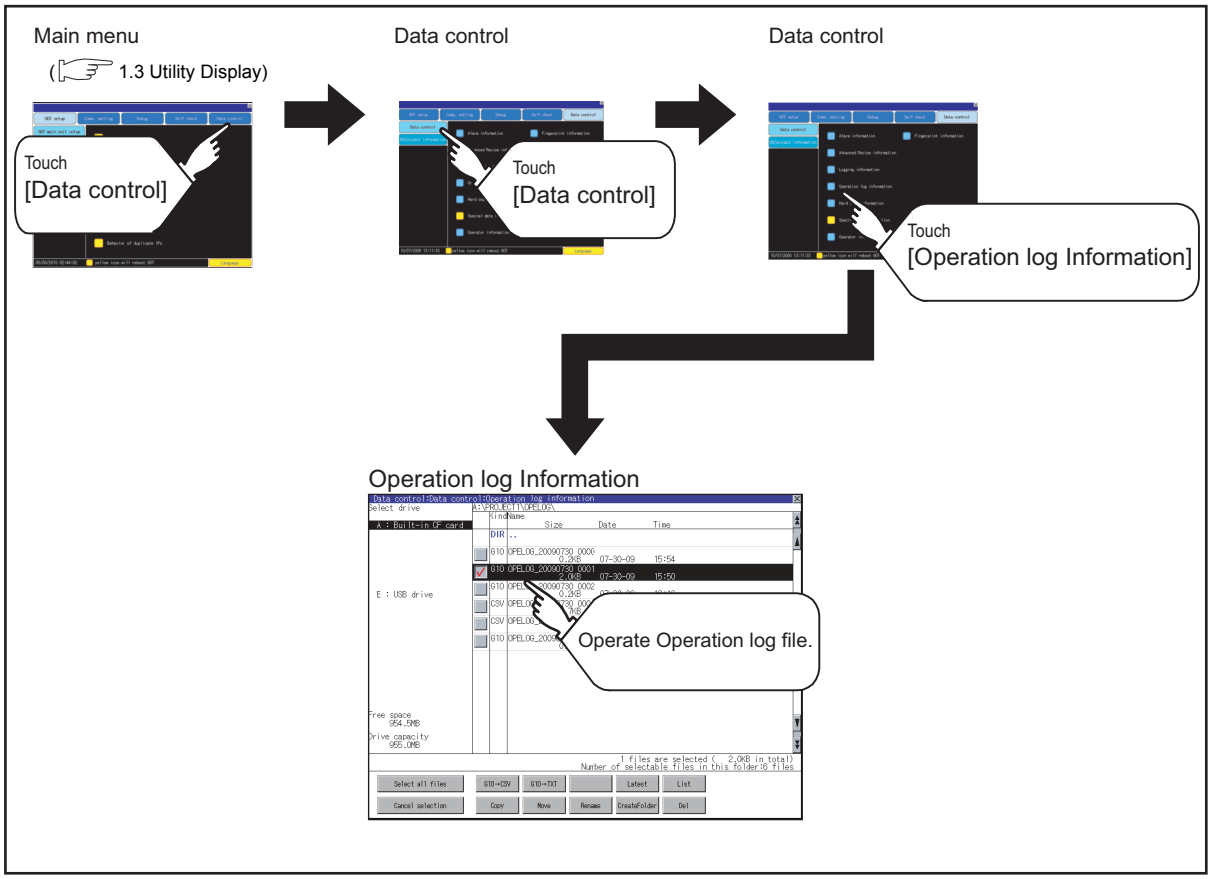
Operation log files created with the operation log function can be copied, deleted or renamed, etc.
Without using a personal computer, you can manage operation log files on the GOT.
For details of the operation log function, refer to the following manual.

☞ •GT Designer3 Version1 Screen Design Manual (Functions)
(22. OPERATION LOG FUNCTION)

•GT Designer2 Version☐ Screen Design Manual (15.2 Operation Log Function)

Function	Description	For GT Designer2	For GT Designer3	Reference
Displaying file, folder data	The file/folder name, data size and creating date & time are displayed.	○	○	■Example of operation log information display
G1O → CSV conversion	G1O file of operation log file is converted to CSV file.	○	○	(2) Operation of G1O CSV conversion, G1O TXT conversion
G1O → TXT conversion	G1O file of operation log file is converted to Unicode text file.	○	○	(2) Operation of G1O CSV conversion, G1O TXT conversion
Del	File or folder is deleted.	○	○	(3) Delete operation
Copy	File is copied.	○	○	(4) Copy operation
Move	Folder is moved.	○	○	(5) Move operation
Rename	File name is changed.	○	○	(6) Rename operation
Create Folder	New folder is created.	○	○	(7) Folder create operation
List	Displays operation logs in a list and allows searching.	○	○	(8) List display
Switching display order	Display order of operation log is switched.	×	○	(8) (a) Display order switching operation
Search	Operation logs are searched.	×	○	(8) (b) Search operation
Latest	Displays the latest operation log in a list.	×	○	(9) Latest display

■ Display operation of operation log information



HINT

Default display drive when displaying the operation log information screen.

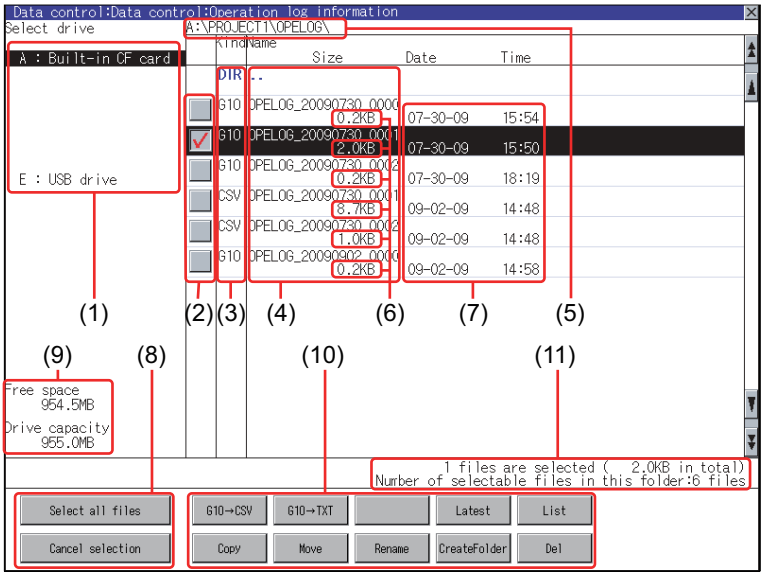
When [Save to] of the [Environmental Setting] dialog box is set in GT Designer3, the default display drive for displaying the operation log information screen is the drive set in GT Designer3.

☞ GT Designer3 Version1 Screen Design Manual (Functions) (22. OPERATION LOG FUNCTION)

In the following cases, the default display drive is A drive.

- [Save to] is not specified in GT Designer3.
- The drive set as [Save to] in GT Designer3 is not found.

■ Example of operation log information display



Number	Item	Description
(1)	Drive	The target drive can be selected. (Even if CF card is not installed, this message appears.)
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. In case of file, displays the extension; in case of folder, displays "DIR".
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the nondisplayed part with the [Rename] button, etc. (☞ (6) Rename operation) After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive/folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Creating date & time	The date and time when each file was created are displayed.
(8)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(9)	Drive size	Displays the used/entire size of drive selected by select drive.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the displayed files and folders.

POINT

About the displayed file

The files other than that for operation log are not displayed on the operation log information screen.

HINT

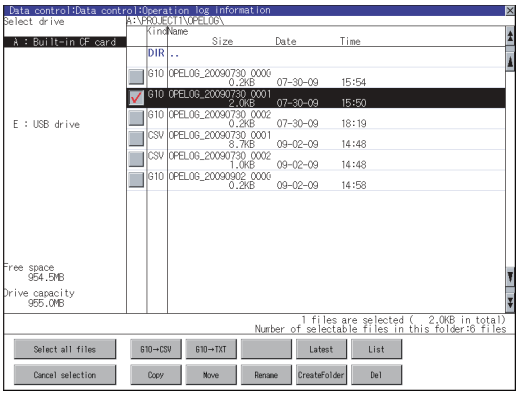
Folders and files displayed

Refer to the following for the details of folders and files displayed.

☞ 6.1.4 Display file

■ Operation log information operation

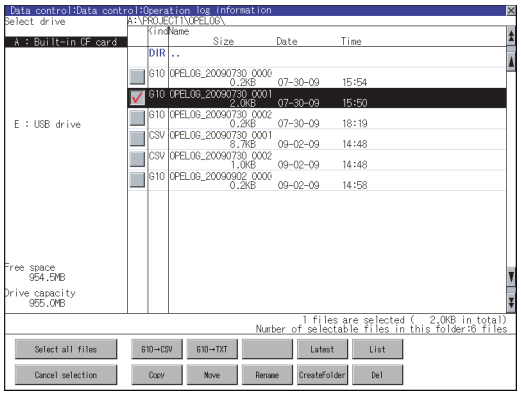
(1) Display operation of operation log information

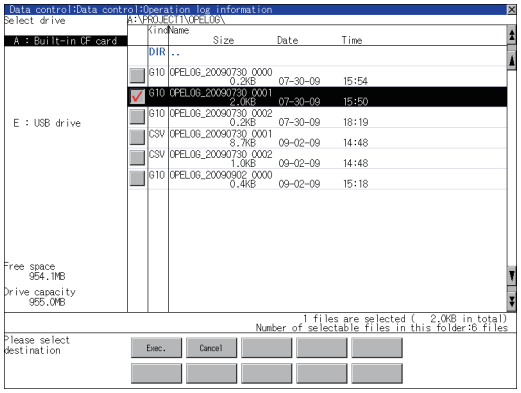


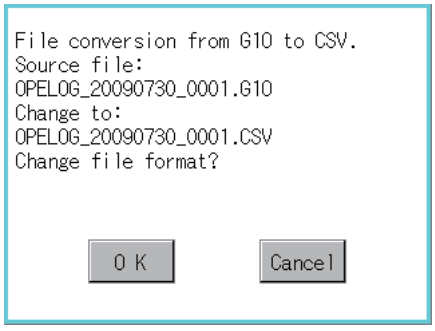
1. If touch a drive of select drive, the information of the touched drive is displayed.
2. If touch a folder name, the information of the touched folder is displayed.
3. If touch a folder of ". .", the information of the folder of the one upper hierarchy is displayed.
4. If touch ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.
   If touch ⏫ ⏬ button, the screen scrolls up/down by one screen.
5. Touch a check box to select the file.
6. For operation of operating switches, refer to the following.
   G1O → CSV ,
   G1O → TXT..... (2) Operation of G1O CSV conversion, G1O TXT conversion
   Delete..... (3) Delete operation
   Copy..... (4) Copy operation
   Move..... (5) Move operation
   Rename..... (6) Rename operation
   Create Folder..... (7) Folder create operation
   List..... .. (8) List display
   Latest..... (9) Latest display
7. If touch ☒ button, the screen is closed.

(2) Operation of G1O → CSV conversion, G1O → TXT conversion

Operation log file (G1O file) is converted to CSV file or Unicode text file that can be displayed/edited on personal computer.







(Example: Dialog box if the [G1O → TXT] button is touched.)

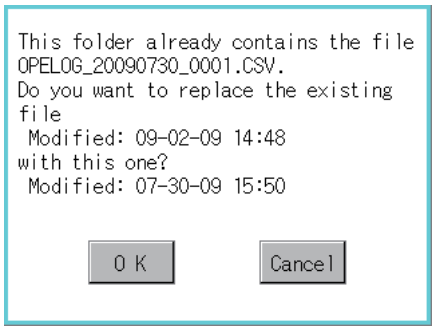
(Continued to next page)

1. Touch the check box of the G1O file, which is to be converted to CSV file or Unicode text file, to select the file.

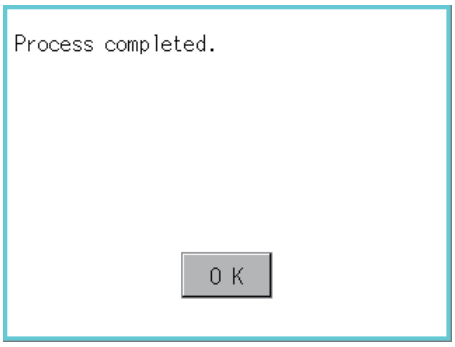
2. Touch the following button in accordance with destination file type.
   - CSV file : [G1O → CSV] button
   - Unicode text file : [G1O → TXT] button

3. Select the target folder.
   (Selecting a folder is not needed for outputting directly below the drive.)

4. If touch the [Exec] button, the dialog box shown left is displayed.
   Touch the [OK] button.
   (While executing, "Processing..." message appears on the screen.)



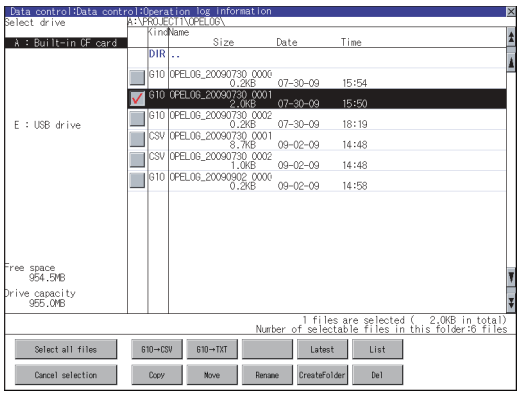
5. When the file, whose name is the same, exists in the destination folder, the dialog box shown left appears without starting the conversion. If touch the [OK] button, overwrites the file.
If touch [Cancel] button, cancels the conversion.



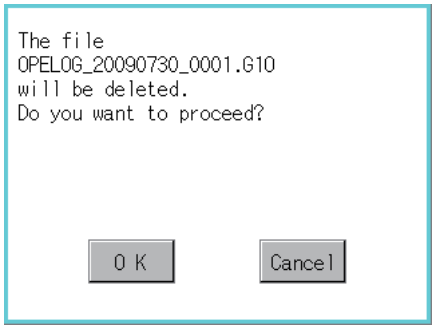
6. The message of completion is displayed in dialog box when conversion is completed.
If touch [OK] button, the dialog box is closed.

(3) Delete operation

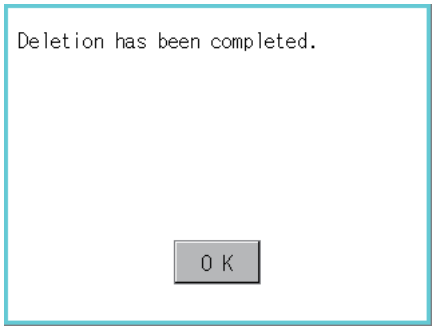
Folder and file to be used on operation log are deleted.



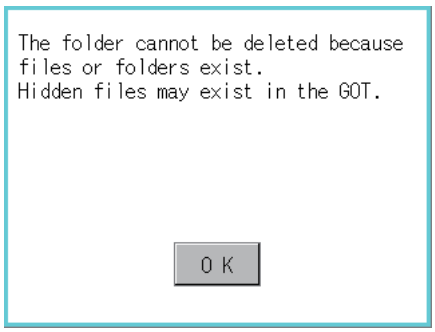
1. Touch the folder to delete, or the check box of the file to delete, to select the file.



2. If touch [Del] button, the dialog box mentioned left is displayed.
If touch [OK] button, the file/folder is deleted. (While executing, "Processing..." message appears on the screen.)
If touch [Cancel] button, the deletion is canceled.



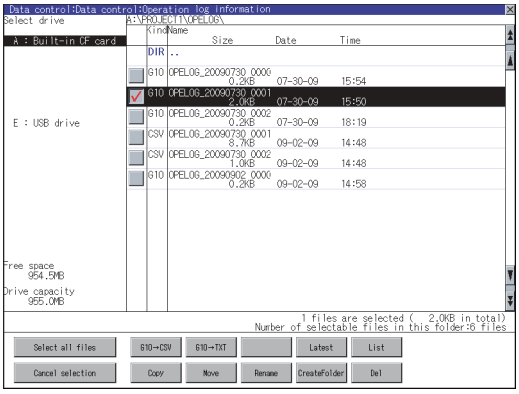
3. When the deletion is completed, the completion dialog box is displayed.
If touch [OK] button, the dialog box is closed.

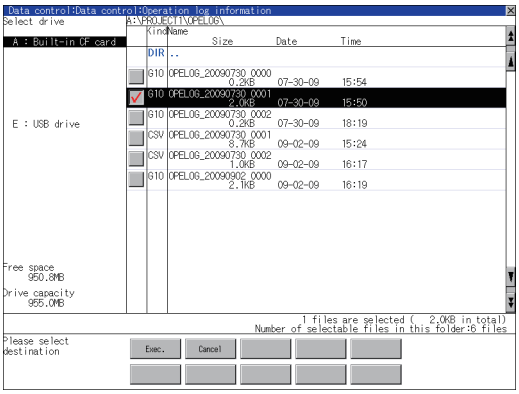


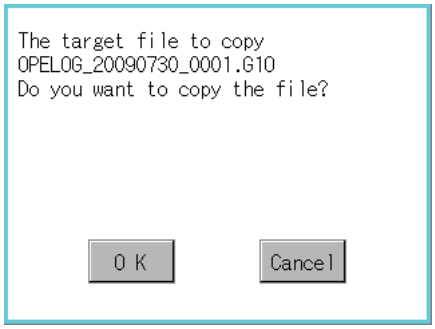
4. When it cannot be deleted, the dialog box showed at left appears. (Only when deleting folder is executed.)
Verify that there is no file in the folder and execute the delete operation again.
(☞ 6.2.4 ■Precautions)

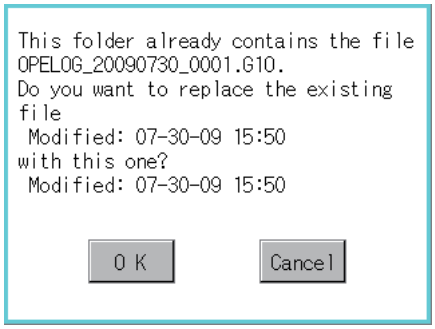
(4) Copy operation

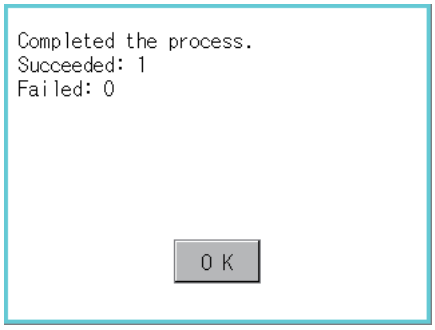
An operation log file is copied.







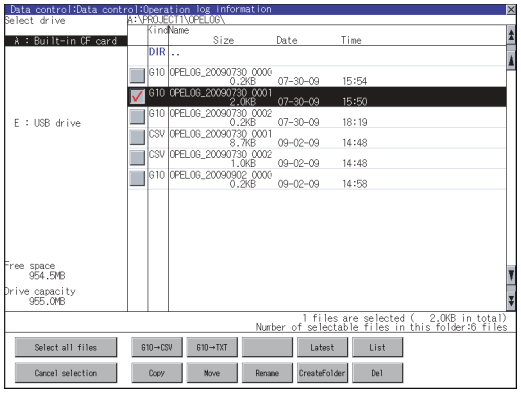




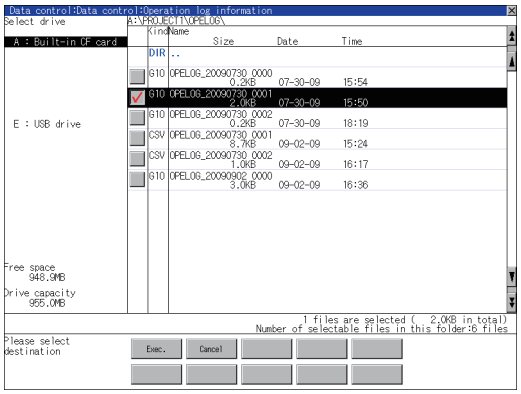
1. Touch the check box of the file to copy, to select the file.
2. Touch the [Copy] button.
3. Select the target folder.
   (Selecting a folder is not needed for outputting directly below the drive.)
   At this time, it cannot be copied into the same folder where the file exists.
   Select other folders.
4. If touch [Exec] button, the following dialog box shown left is displayed.
   Touch [OK] button.
   (While executing, "Processing..." message appears on the screen.)
5. If there is a file of the same name in the copy destination folder, the following dialog is displayed without starting the copy.
   If touch the [OK] button, overwrites the file.
   If touch [Cancel] button, cancels to copy.
6. When the copy is completed, the dialog box of completion is displayed.
   If touch [OK] button, closes the dialo

(5) Move operation

An operation log file is moved.

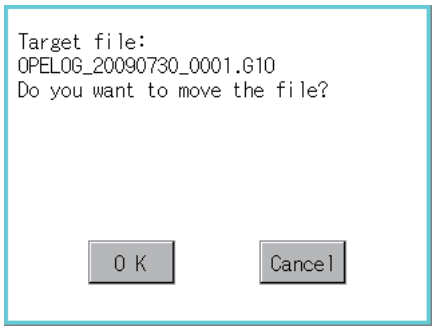


1. Touch the check box of the file to be moved to select the file.
2. Touch the [Move] button.

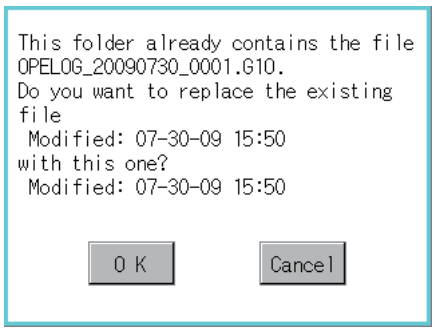


3. Select the target folder.
(Selecting a folder is not needed for moving directly below the drive.)

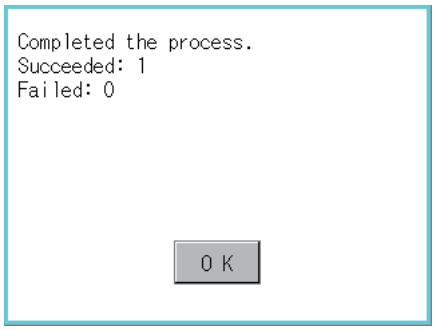
(Continued to next page)



4. If touch the [Execute] button, the dialog box shown left is displayed.
Touch the [OK] button.
(While executing, "Processing..." message appears on the screen.)



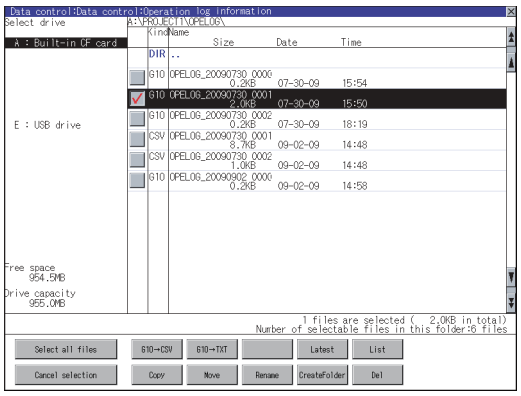
5. When only file with the same name exists in the destination folder, the dialog shown left appears without starting the movement.
Touching the [OK] button overwrites the file.
If touch the [Cancel] button, cancels moving.



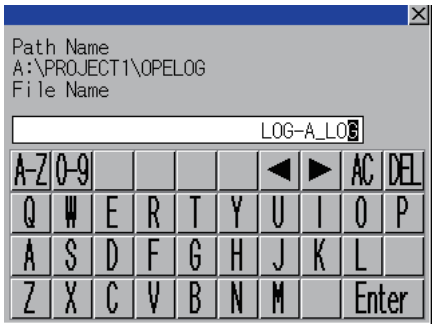
6. When moving is completed, completion dialog box is displayed.
If touch the [OK] button, closes the dialog box.

(6) Rename operation

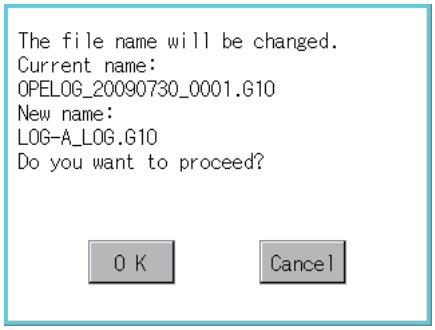
An operation log file is changed.



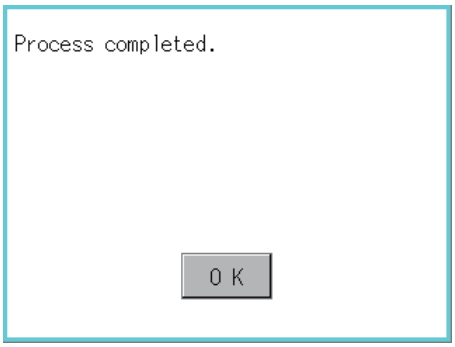
1. Select the check box of the file to be renamed by touching.



2. If touch the [Rename] button, displays the screen shown left, then input the file name to be renamed.
   By touching the following button, input text type is changed.
   [A-Z]: English capital
   [0-9]: Numeric/Symbol



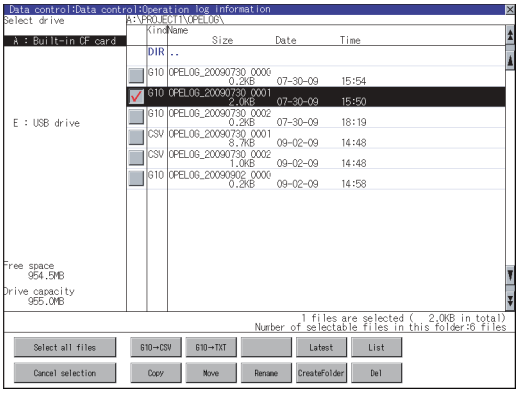
3. If touch the [Enter] button, displays the dialog box shown left.
4. If touch the [OK] button, starts renaming file. (While executing, "Processing..." message appears on the screen.)



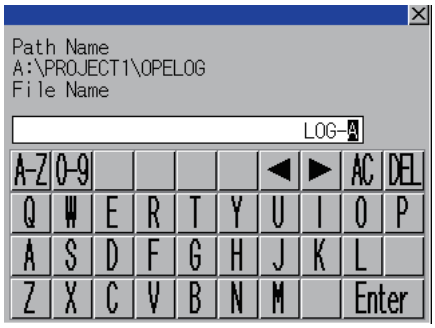
5. When renaming is completed, completion dialog box is displayed.
   If touch the [OK] button, closes the dialog box.

(7) Folder create operation

An operation log folder is created.



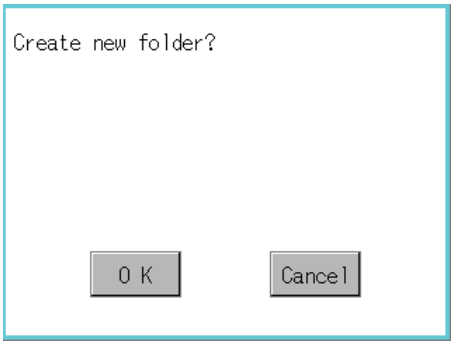
1. Touch the [Create Folder] button.



2. The input key window shown left appears, then input the file name to be created.
   By touching the following button, input text type is changed.

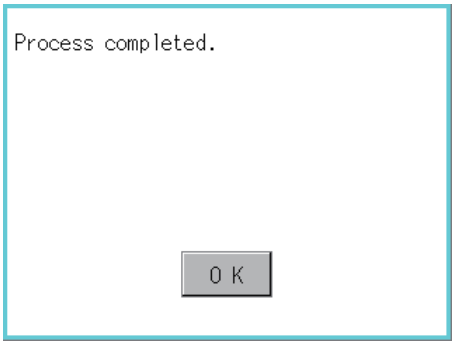
   [A-Z]: English capital

   [0-9]: Numeric/Symbol



3. If touch the [Enter] button, displays the dialog box shown left.

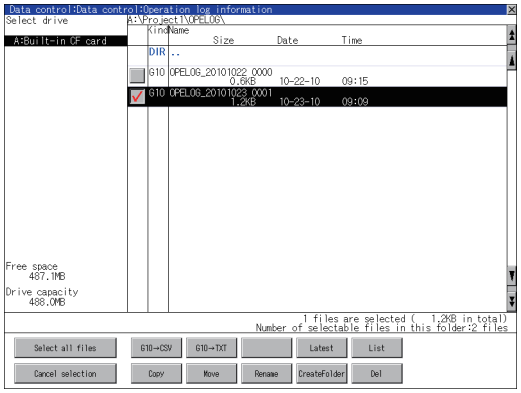
4. If touch the [OK] button, starts creating folder.



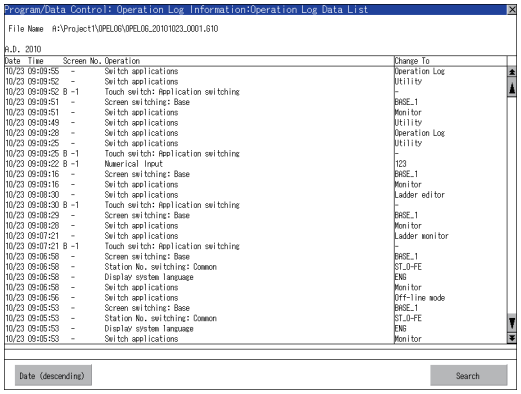
5. When creating folder is completed, completion dialog box is displayed.
   If touch the [OK] button, closes the dialog box.

(8) List display

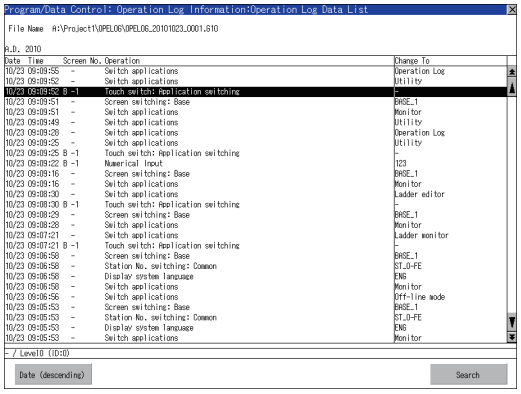
Displays operation logs in an operation log file in a list.



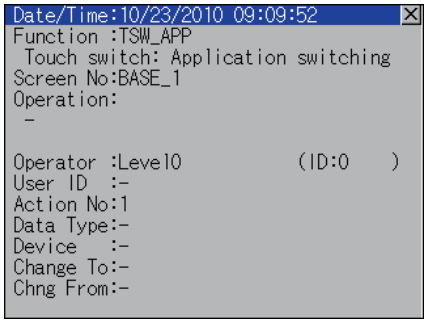
1. Touch the check box of the file to display the list to select the file.



2. Touching the [List] button displays the list. In the list, the following contents can be checked.
   Display items: Date
   Time
   Screen No.
   Operation type
   Value after change
   For operation of operating switches, refer to the following.
   Date (ascending/descending) ..... (a) Display order switching operation
   Search..... (b) Search operation

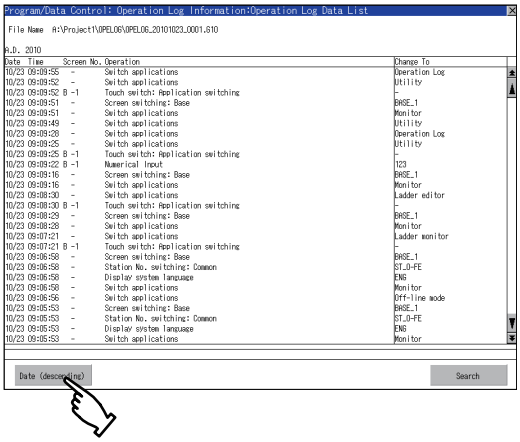


3. To display the details of an operation log, touch the row for that operation log to select it. The color of the row is inverted (white → black).



4. Touching the selected row again displays the detailed information for the operation log. Touch the ☒ button to close the dialog box.

(a) Display order switching operation



1. Touch [Date (ascending)]/ [Date (descending)] in the list to switch the display order of operation logs.
   [Date (ascending)] and [Date (descending)] are switched every time the button is touched.
   The buttons show the current display order.
   - [Date (ascending)]: Data is displayed in chronological order as collected.
   - [Date (descending)]: Data is displayed in reverse chronological order as collected.

POINT

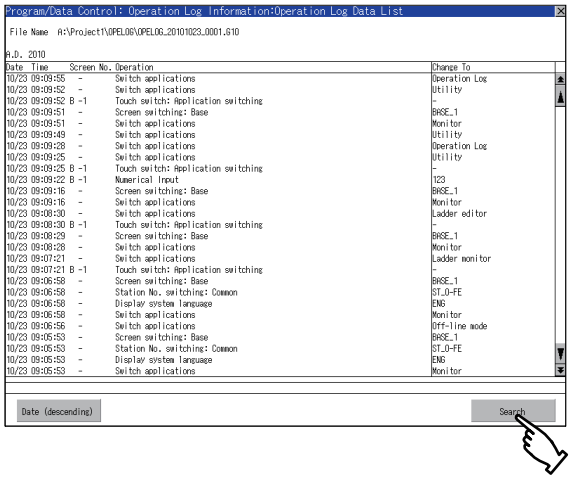
(1) Selected line position after switching the display order

After the display order is switched while lines are selected, the lines still remain selected.
Depending on which line is selected, the selected line may not be displayed on the screen after switching the display order.

(2) Display order of operation logs in non-chronological order

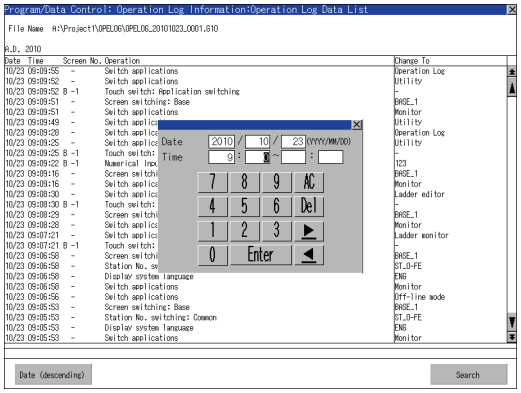
When the display order of operation logs are switched, the logs are displayed in order as collected, not in order as the date they are collected.
In case that the displayed operation logs are not lined up in time order due to the time change of GOT clock, the displayed logs may not be lined up in order of the log dates even though the operation logs are switched.

(b) Search operation

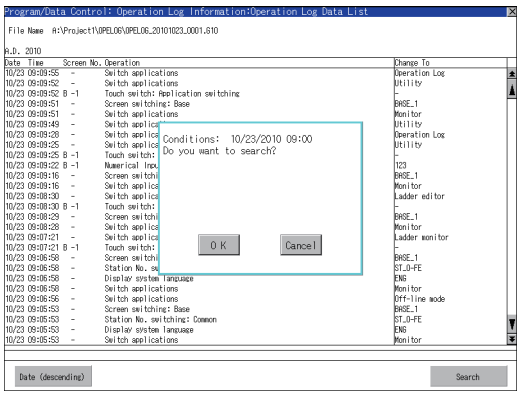


1. Touching [Search] in the list enables searching of a log using the following items.
   Item: Date
   Time

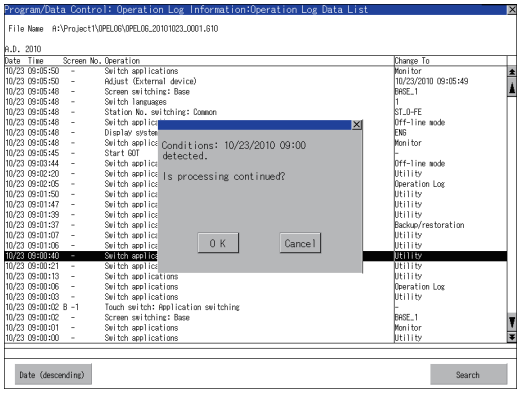
(Continued to next page)



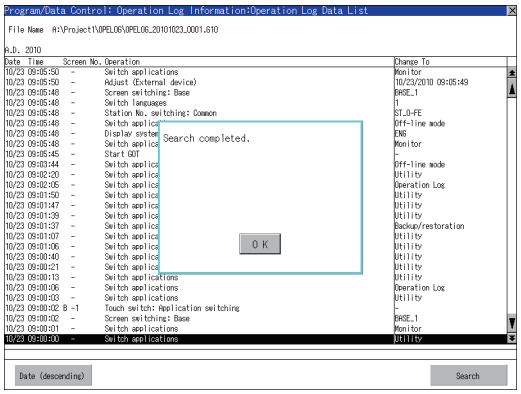
2. Input the date or time to be searched.



3. Touching the [Enter] button displays the dialog box on the left.
Touch the [OK] button.
(When processing is being executed, the "Processing" message is displayed on the screen.)



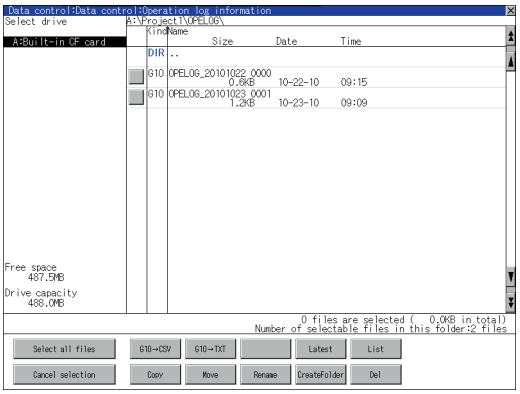
4. The results found are displayed and the dialog box on the left is displayed.
To continue a search, touch the [OK] button.
To stop a search, touch the [Cancel] button.



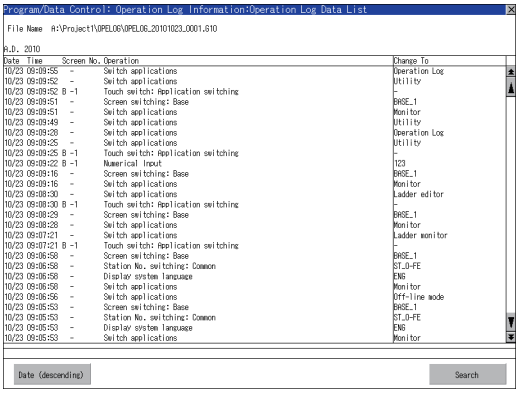
5. When searching is completed, a completion message is displayed in the dialog box.
Touching the [OK] button closes the dialog box.

(9) Latest display

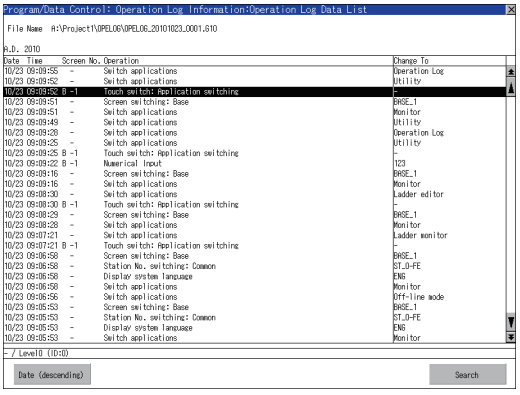
The latest operation log files are selected and displayed in a list.



1. If touch the [Latest] button, the latest one in the operation log files is displayed in a list.



2. In the list, the following contents can be checked.
   Display items: Date
   Time
   Screen No.
   Operation type
   Value after change
   For operation of operating switches, refer to the following.
   Date (ascending/descending)
   ..... (8) (a) Display order switching operation
   Search..... (8) (b) Search operation



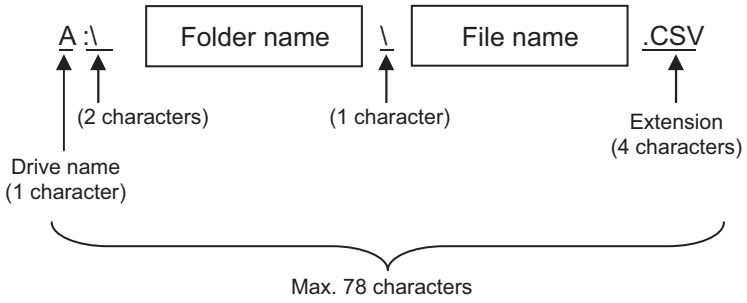
3. For the method for displaying the detail of each operation log, refer to the following.
   (8) List display

■ Precautions

(1) Precautions for create/delete

(a) Number of characters set for folder or file name when creating folder/file.
GOT recognizes file location according to path explained below.
Specify folder or file name, and total characters of path cannot exceed 78 characters.
Users only can rename folder or file name.
(Other than folder/file name is automatically printed.)

Example: CSV file Path in CF card or USB memory



HINT

If folder is assigned the hierarchy.
The \ mark is displayed between folder name and folder name, folder name and file name.
The \ mark is also counted as one character.

(b) Character strings that cannot be set to folder/file
The following character strings cannot be used as a folder name or a file name. Even small characters of those cannot be used.

- COM1 to COM9
- LPT1 to LPT9
- AUX
- CON
- NUL
- PRN
- CLOCK$

In addition, the folder/file name showed below cannot be used.

- The folder name which begins with G1.
- Folder name and file name which begin with . (period).
- Folder name and file name which finish with . (period).
- Folder name and file name which have only . (one period) or ..(two periods).

(c) For deleting the folder
The folder in which the file exists cannot be deleted.
Delete the folder after having deleted the files.
In addition, on the operation log information screen, the file other than that for operation log is not displayed on GOT.
When the folder, in which there is no file displayed on the screen, cannot be deleted, confirm whether there is other file in CF card or USB memory by using personal computer, etc.

(2) Precautions for operation

(a) Precautions during folder/file operation (Create/Delete/Copy/File output, etc)
Even if CF card access switch has been turned OFF while GOT is processing folders and files, the processing continues to be executed.
(Example: Even if CF card access switch has been turned OFF while GOT is creating a folder, the folder is created.)
Therefore, do not pull out the CF card while the "Processing..." message is on the screen after CF card access switch has been turned OFF.

6.2.5 Hard copy information

■ The function of hardcopy information

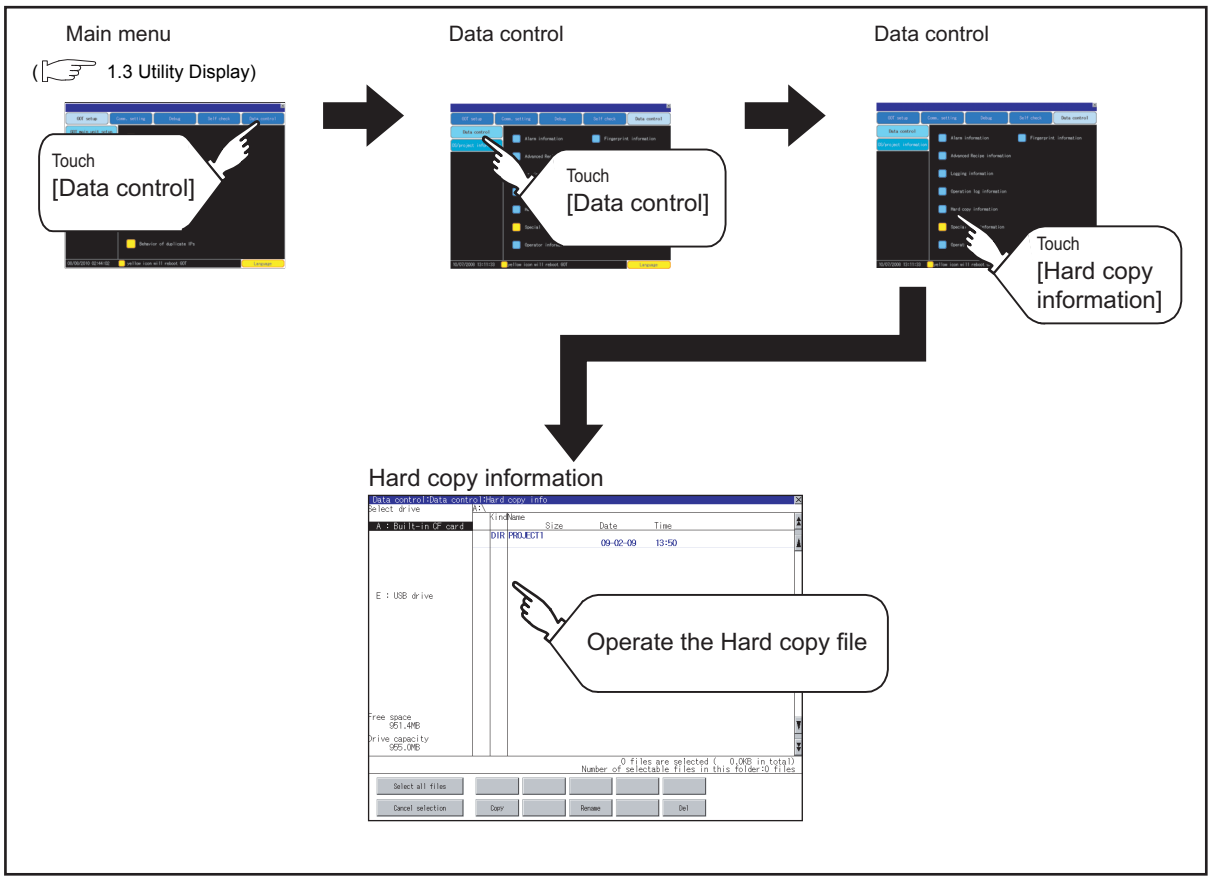
Carries out delete, copy and move to the file created by the hardcopy function.
Refer to the following manual for details of hard copy function.

☞ •GT Designer3 Version1 Screen Design Manual (Functions) (38 HARD COPY FUNCTION)

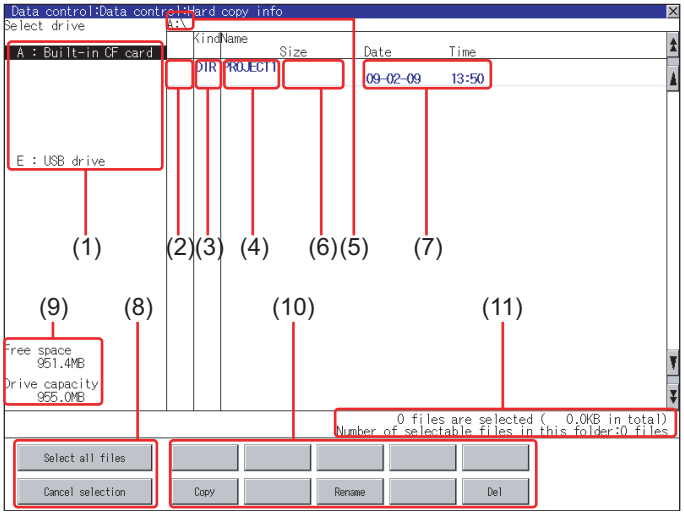
•GT Designer2 Version☐ Screen Design Manual (13.2 Hard Copy)

Function	Description	For GT Designer2	For GT Designer3	Reference
Information display of files and folders	Displays the kind, name, data size, creation date and time of the file or folder.	○	○	■Hardcopy information display example ■The operation of hardcopy information
Delete	Deletes the file.	○	○	(2) Delete operation
Copy	Copies the file.	○	○	(3) Copy operation
Rename	Renames the file.	○	○	(4) Rename operation

■ The display operation of hardcopy information



■ Hardcopy information display example



Number	Item	Description
(1)	Select drive	The drive which displays file or folder can be selected. When CF card or USB memory is not installed, the following drives are not displayed. ・ CF card: [A: Built-in CF card], [B: Memory card] ・ USB memory: [E: USB drive]
(2)	Check box	If the check box is selected, up to 512 files can be selected.
(3)	Kind	Indicates whether the displayed name is file or folder. In case of file, displays the extension; in case of folder, displays "DIR".
(4)	Name	Displays the file name or folder name. For the long file/folder name, entire part may not be displayed. Confirm the nondisplayed part with the [Copy] button, etc. (☞ (3) Copy operation) After confirmation, touch the [Cancel] button to cancel the operation.
(5)	Path name	Displays the path name of drive/folder which is currently displayed.
(6)	Size	Displays the size of the file displayed in Name.
(7)	Date and time	Displays the creation date and time of each file.
(8)	Select all files/Cancel selection	Multiple files can be selected or canceled at once. Touch the [Select all files] button to select all files. If the number of the displayed files exceeds 513, the first 512 files are selected.
(9)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection.
(10)	Operation switch	Execution switch of each function.
(11)	Number of folders and files	Displays the total number of the files and folders displayed.

POINT

Display of the creation date and time

The creation date and time display is not updated even if a file is created or updated while displaying the hardcopy information.

To display the updated creation date and time, close the screen currently displayed (by moving to the upper hierarchy folder, etc.) and display the screen again.

HINT

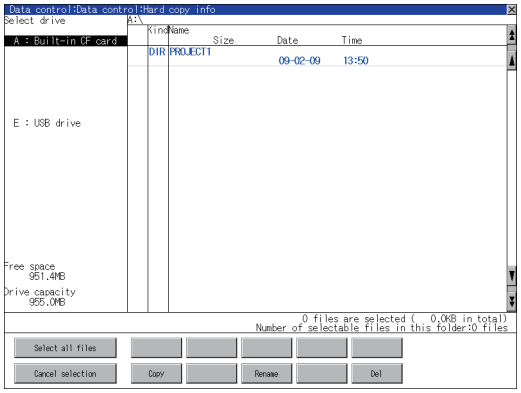
Displayed folders and files

For the folders and files displayed, refer to the following.

☞ 6.1.4 Display file

■ The operation of hardcopy information

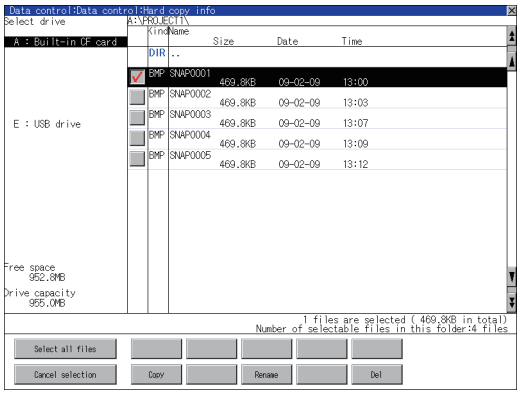
(1) Display operation of hardcopy information



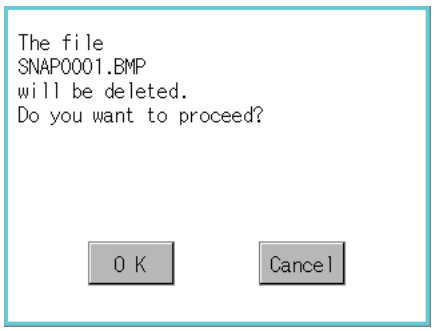
1. If touch a drive of [select drive], the information of the touched drive is displayed.
2. If touch a folder name, the information in the touched folder is displayed.
3. If touch a name of the folder of ". .", the information in the folder of one higher hierarchy is displayed.
4. If touch ▲▼ button of the scrollbar, scrolls up/down line by one line.
   If touch ⏫⏬ button, the screen scrolls up/down by one screen.
5. Touch a check box to select the file.
6. For the operations of the delete, copy, and rename, refer to the following.
   Delete..... (2) Delete operation
   Copy..... (3) Copy operation
   Rename..... (4) Rename operation
7. If touch ☒ button, closes the screen.

(2) Delete operation

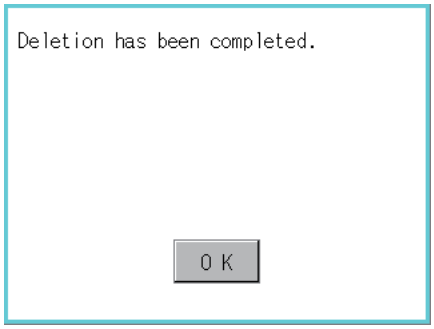
Deletes the selected file.



1. Touch the check box of the file to delete, to select the file.



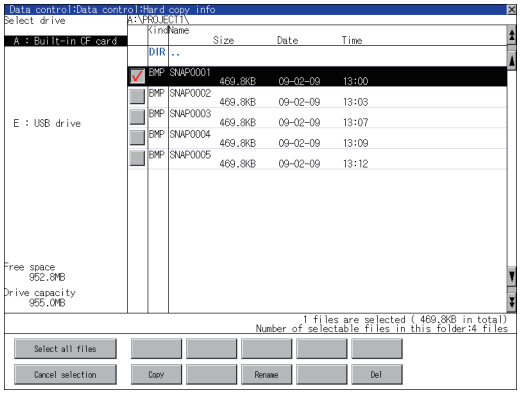
2. If touch [Del] button, the screen mentioned left is displayed.
   If touch [OK] button, deletes the file.
   If touch [Cancel] button, cancel the deletion.



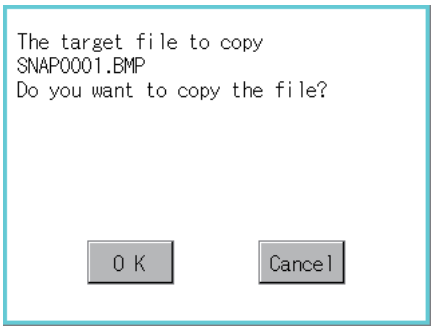
3. When the deletion is completed, the completion dialog box is displayed.
   If touch [OK] button, the dialog box is closed.

(3) Copy operation

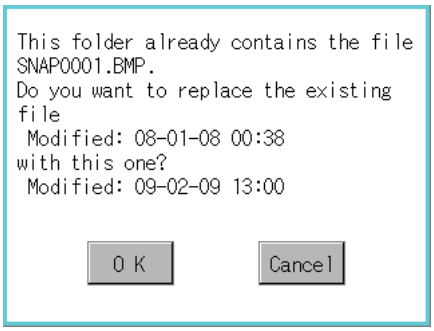
Copies the selected file.



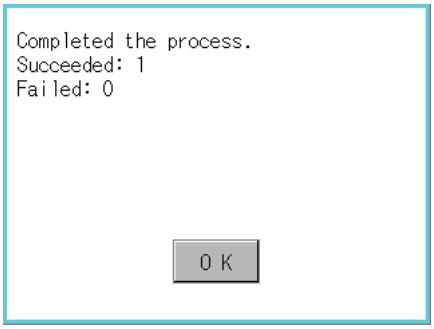
1. Touch the check box of the file to copy, to select the file.
2. If touch [Copy] button, the dialog [Please select a destination.] is displayed in the left bottom of the screen.
3. If touch the folder of the copy destination, the screen display is changed to the folder of copy destination.
   The copied file cannot be copied to its own folder.Select the different folder.



4. If touch [Exec] button, the dialog box shown left is displayed.



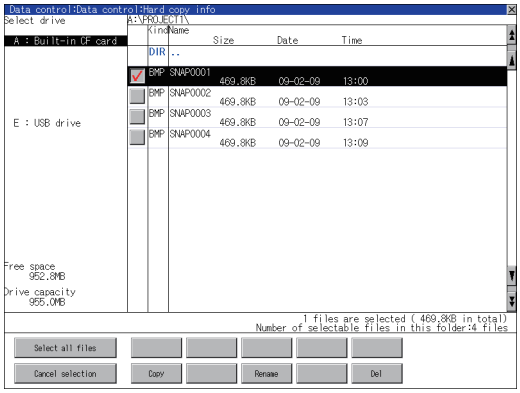
5. Touch [OK] button.
   If there is a file of the same name in the copy destination folder, the screen shown left is displayed without starting to copy.
   If touch the [OK] button, overwrites the file.
   If touch [Cancel] button, cancels to copy.



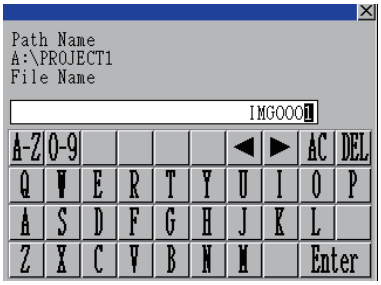
6. When the copy is completed, the dialog of completion is displayed.
   If touch [OK] button, the dialog box is closed.

(4) Rename operation

Rename the selected file.



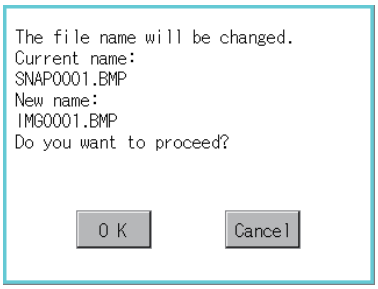
1. Select the check box of the file to be renamed by touching.



2. Touch the [Rename] button, and then the screen shown left is displayed. Input the file name to be changed.
Character types to be input can be changed with touching the following buttons.

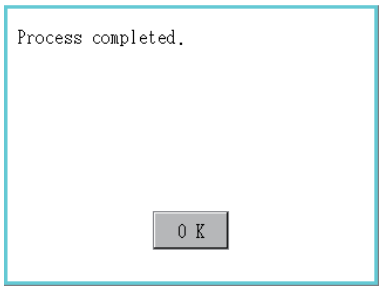
[A-Z] : Alphabet capital

[0-9] : Numeric/Symbol



3. Touch the [Enter] button, and then the dialog box shown left is displayed.

4. Touch the [OK] button, and then renaming the file is started.



5. When renaming the file is completed, a completion dialog box is displayed.
Touch the [OK] button, and then the dialog box is closed.

6.2.6 Special data information

■ Special data information function

Special data used in the intelligent unit monitor function or others can be copied, deleted, downloaded, or uploaded. For details of special data, refer to the following manual.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(7.5 Data Types and Sizes Transferred to the GOT)
•GT Designer2 Version☐ Basic Operation/Data Transfer Manual
(8.1 Data Types and Sizes Transferred to the GOT)

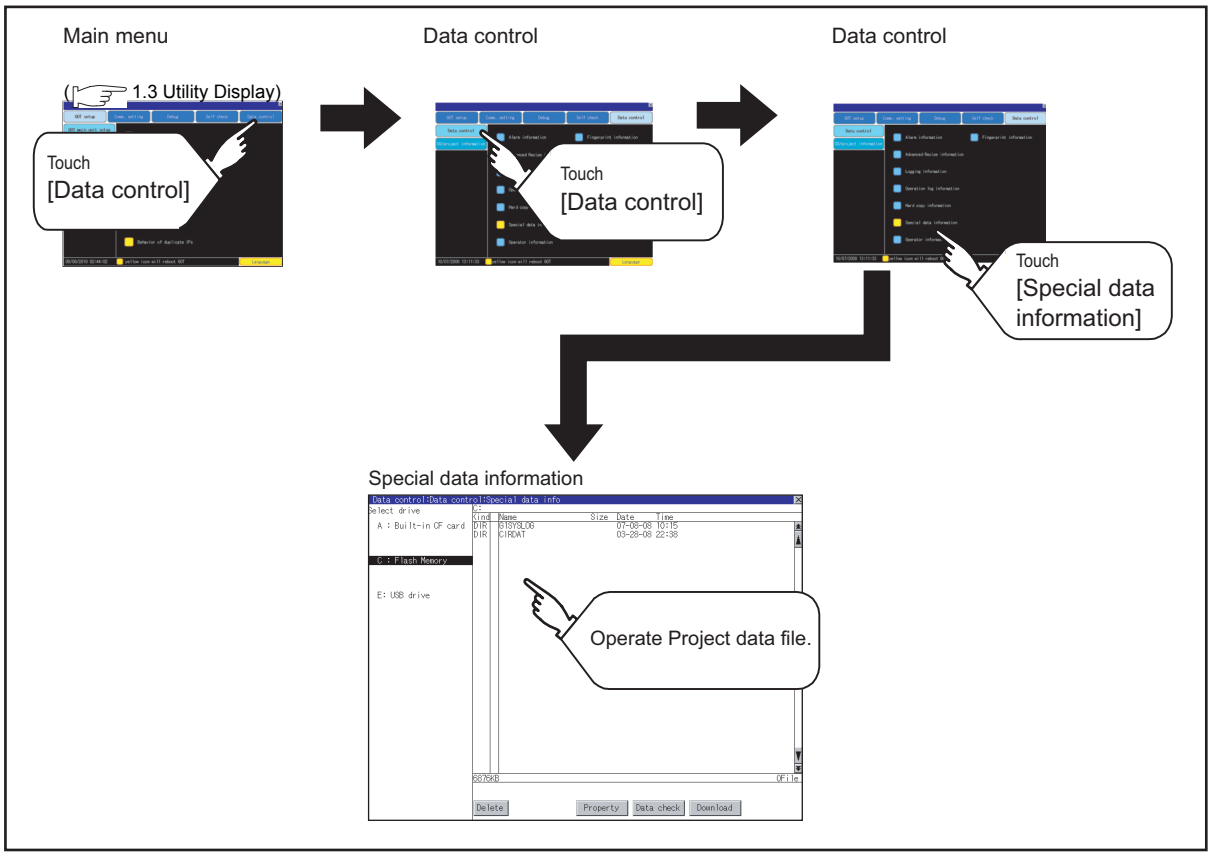
Function	Description	For GT Designer2	For GT Designer3	Reference
Information display of files and folders	Displays the name, data size, creation date and time of file or folder.	○	○	■Special data information display example
Delete	Deletes a file or holder.	○	○	(2) Delete operation
Property	Displays the property of special data.	○	○	(3) Property display operation
Data check	Copies a file.	○	○	(4) Data check operation
Download	Downloads the special data written in the A drive (Standard CF Card) / B drive (Extended memory card) / E drive (USB drive) to the C drive (Built-in flash memory).	○	○	(5) Download operation

POINT

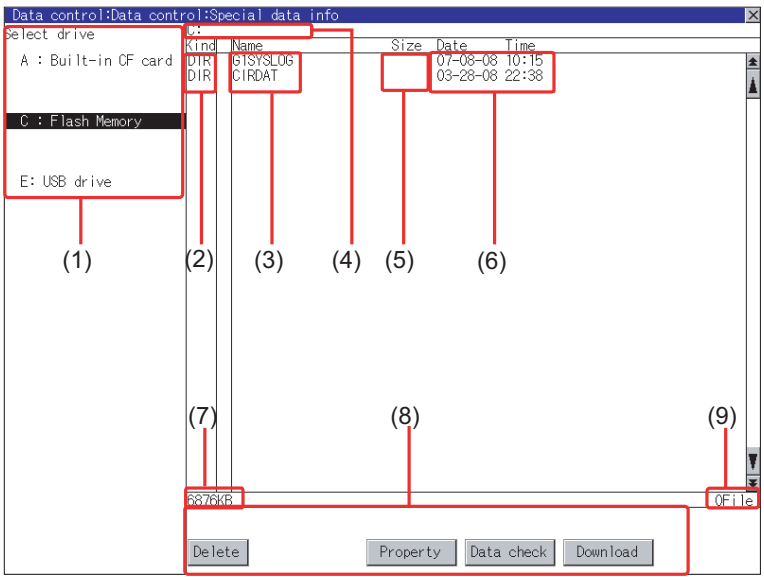
Precautions for operating special data

When the OS boot drive is set to [A: Standard CF Card], deleting and downloading special data are not available.

■ Special data information display operation



■ Special data information display example



Number	Item	Description
(1)	Select drive	The drive by which a file or folder is displayed can be selected. When CF card or USB memory is not installed, the following drives are not displayed. ・ CF card: [A: Built-in CF card], [B: Memory card] ・ USB memory: [E: USB drive]
(2)	Kind	Indicates whether the displayed name is file or folder. In the case of file, displays the extension; in the case of folder, displays "DIR".
(3)	Name	Displays the name of special data in the selected drive. When the name exceeds 18 characters, the 19th and later characters are not displayed. The special data being monitored on the GOT is preceded by "*%".
(4)	Path name	Displays the path name of drive /folder which is currently displayed.
(5)	Size	Displays the size of the file displayed in Name.
(6)	Date and time	Displays the date and time when each file is installed.
(7)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection. (Only the size in use is displayed when selecting the C drive.)
(8)	Operation switch	Displays switch of each function executable in the Special data information (download, upload, etc.).
(9)	Number of folders and files	Displays the total number of displayed files and folders.

HINT

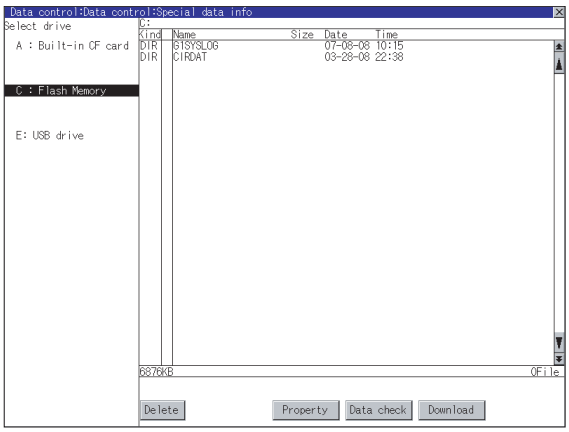
Folders and files displayed

For the folders and files displayed, refer to the following.

6.1.4 Display file

■ Special data information operation

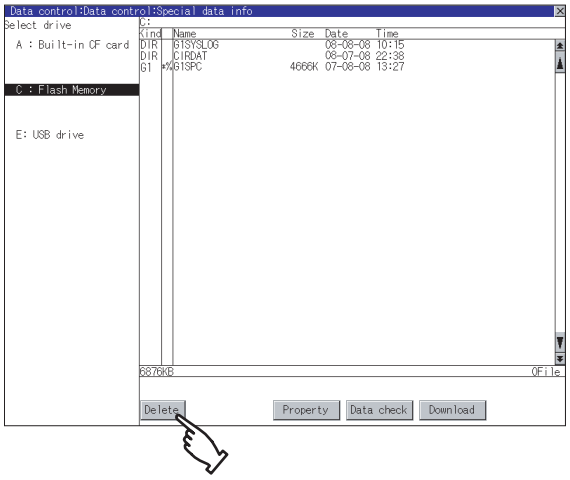
(1) Special data information display operation



1. If touch a drive in [Select drive], the special data in the drive is displayed.
2. Refer to the following for operation of delete, property, data check and download.
   - Delete..... (2) Delete operation
   - Property..... (3) Property display operation
   - Data check..... (4) Data check operation
   - Download..... (5) Download operation
3. Touching the ⊠ button closes the screen.

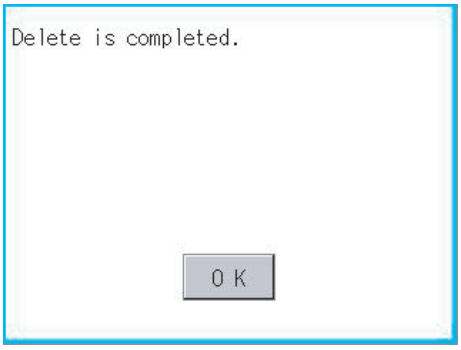
(2) Delete operation

Deletes the selected file.



1. Touch and select the file to delete.

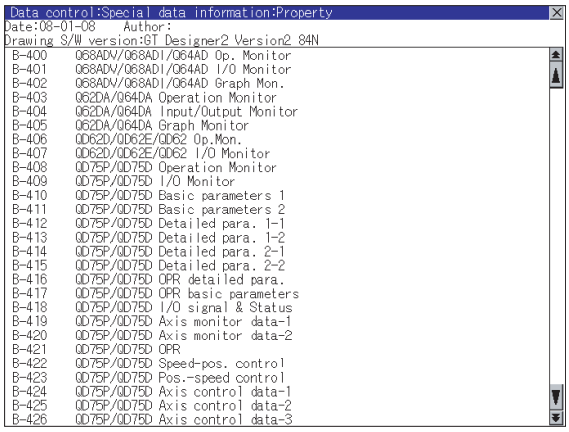
2. If touch the [Delete] button, the screen mentioned left is displayed.
   Check if the deletion target file is specified correctly.
   Touching the [OK] button deletes the file.
   Touching the [Cancel] button cancels the deletion.



3. When the detection is completed, the dialog mentioned left is displayed.
   If touch the [OK] button, the dialog box is closed.

(3) Property display operation

Displays the property of selected special data.



1. Touch the [Property] button after selecting a special data to display Property as shown left. In Property display, the following information is displayed.

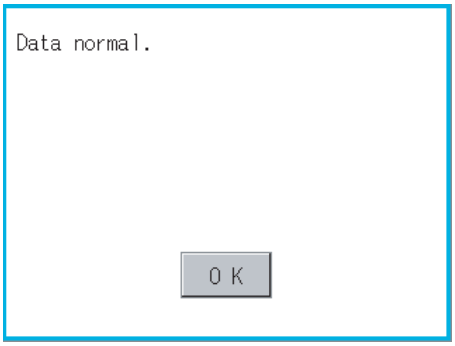
Item	Description
Date	Displays date and time of file creation.
Author	Displays the author of the project data.
Drawing S/W version	Displays name and version of the drawing software by which the project is created.

2. If touch the ▲ ▼ button, the screen scrolls up/down line by one line.
3. If touch the ⏫ ⏬ button, screen scrolls up/down by one screen.
4. If touch the ⊠, the property display is closed and returned to the previous screen.

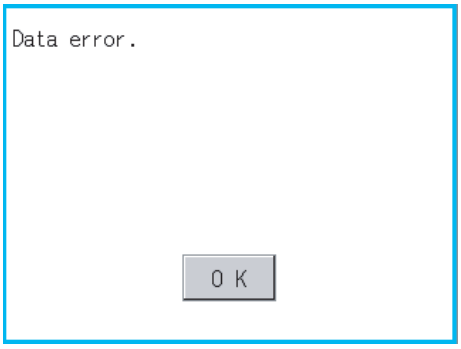
(4) Data check operation

Checks the selected special data.

Dialog when data is normal



Dialog when data is error



1. Select a data check target file and touch the [Data check] button.
   The data check is executed and the result is displayed by the dialog box shown left.
2. If touch the [OK] button the dialog box is closed.

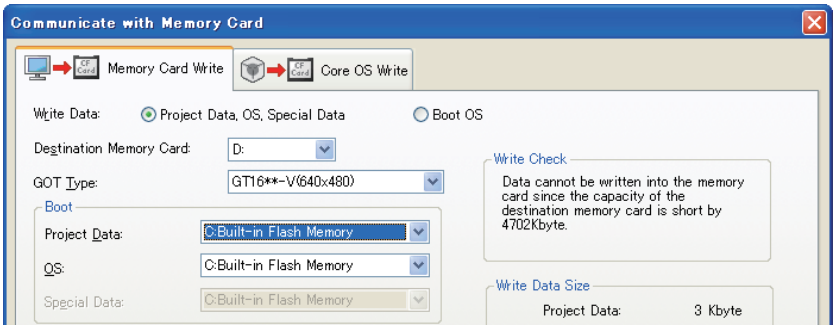
(5) Download operation

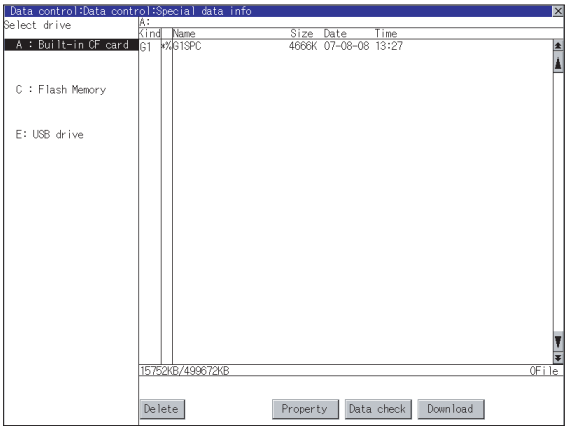
Transfers the special data written in the A drive (Standard CF Card), B drive (Extended memory card) or E drive (USB drive) to the C drive (Built-in flash memory).
The GOT monitors C drive data.
(This item explains using the A drive.)

POINT

Special data to be stored in a CF card

When storing the project data from GT Designer3 or GT Designer2 to CF card, select [C: Built-in flash memory] for [Project Data] in [Boot Drive].





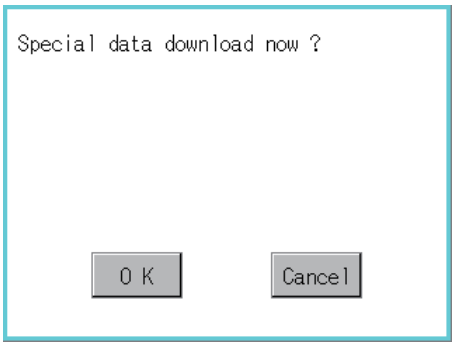
1. Install a CF card or USB memory on the GOT. Refer to the following for inserting/removing method of CF card or USB memory.

   (Hardware)
   8.3.2 ■ CF card

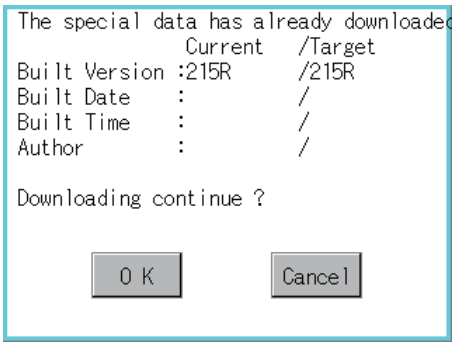
   (Hardware)
   8.5.2 ■ Install USB peripheral devices

2. Touch [A: Standard CF Card] in Select drive.

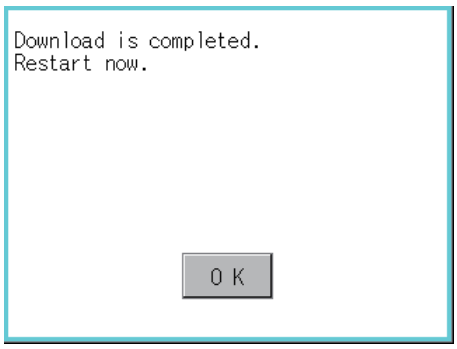
(Continued to next page)



3. If touch the [Download] button, the screen mentioned left is displayed. Downloading is executed when the [OK] button is touched.



4. If there is a project data of the same name in the C drive, the screen shown left is displayed.
If touch the [OK] button, the project data is downloaded and the project data in the C drive is overwritten. Downloading is canceled when the [Cancel] button is touched



5. When the downloading is completed, the dialog box mentioned left is displayed.
Touching the [OK] button restarts the GOT.

6.2.7 Operator information

■ Operator management

(1) Operator management function

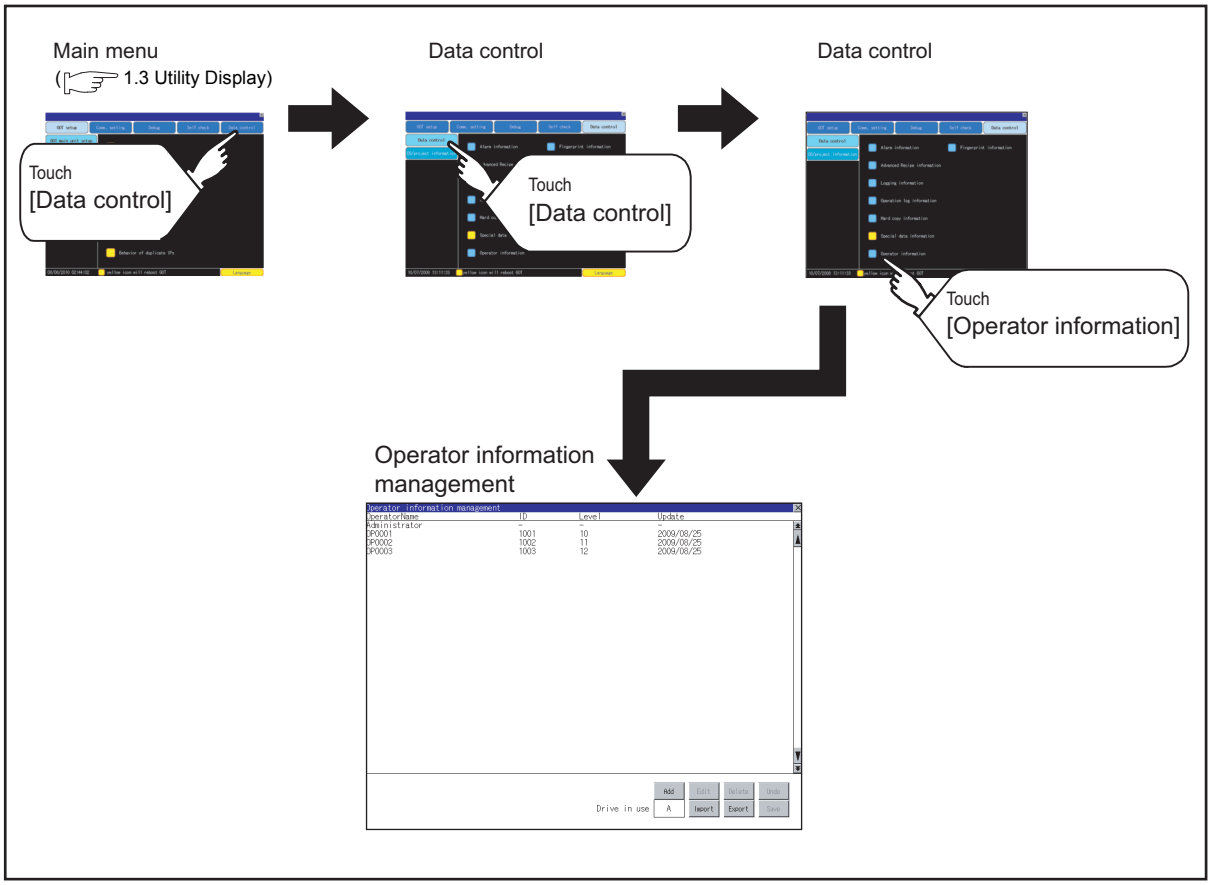
The function enables displaying a list of the operator information and adding, changing, or deleting the operator information to be used.
A password for operator authentication can be changed when the password is out of date.
Functions for the operator authentication (automatic logout time, authentication method, password expiration date, etc.) can be set.
For details of operator authentication functions, refer to the following manual.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals) (4.7 Security Setting)

•GT Designer2 Version□ Screen Design Manual (3.5 Security Setting)

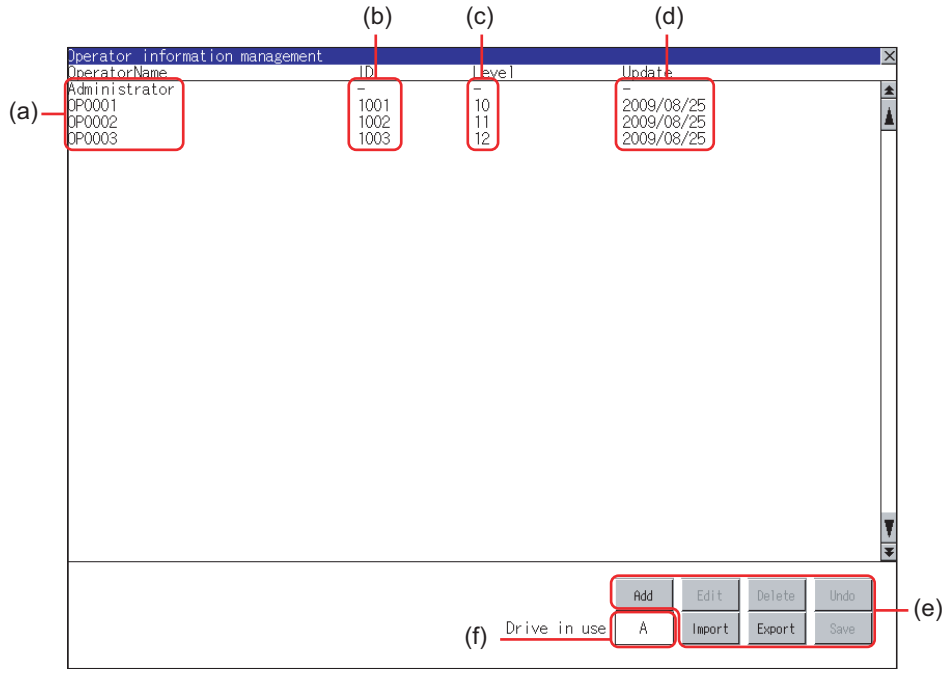
Function	Description	For GT Designer2	For GT Designer3	Reference
Operator management	Enables adding, editing, deleting, importing, and exporting the operator information.	○	○	(2) Display operation of operator management (4) Operator management operation
Add operation	Adds operator information to the GOT.	○	○	(a) Add operation
Edit operation	Edits the operator information stored in the GOT.	○	○	(b) Edit operation
Delete operation	Deletes the operator information stored in the GOT.	○	○	(c) Delete operation
Undo	Restores the current operator information to the previous saved one.	○	○	(d) Undo operation
Import operation	Imports the operator information that is already exported to a CF card to the GOT.	○	○	(e) Import operation
Export operation	Exports the operator information stored in the GOT to a CF card.	○	○	(f) Export operation
Password change	Enables changing passwords to be used for login and logout in/out of the GOT.	○	○	■Password change
Function setting	Enables setting the automatic logout time and password expiration date.	○	○	■Function setting

(2) Display operation of operator management



(3) Display example of operator management

(a) Operator information management screen

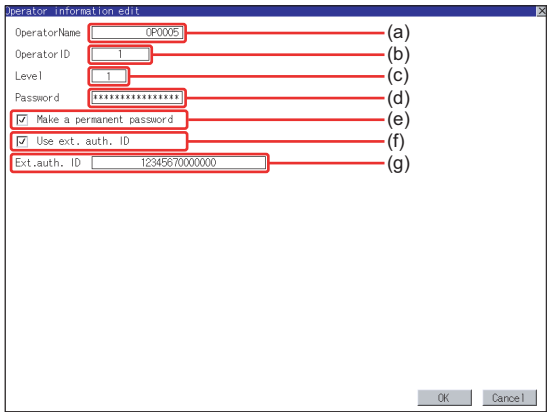


No.	Item	Description
(a)	Operator Name	Displays operator names.
(b)	ID	Displays operator IDs.
(c)	Level	Displays security levels for operators.
(d)	Update	Displays the last updated dates of the operator information.
(e)	Operation keys	Execution keys for each function
(f)	Drive in use	Displays and sets the storage location for imported and exported operator information. Touch the item, and then the display switches. (A: Built-in CF card/B: Memory card) The display switches only when a memory card or USB drive is installed on the GOT.

(b) Operator information edit screen

Touch the [Add] button or touch the [Edit] button with the operator information selected on the Operator information management screen, and then the Operator information edit screen is displayed.

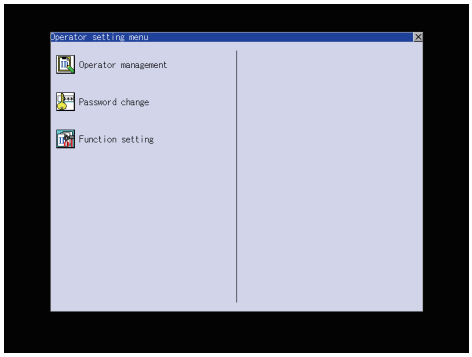
The operator information can be edited.



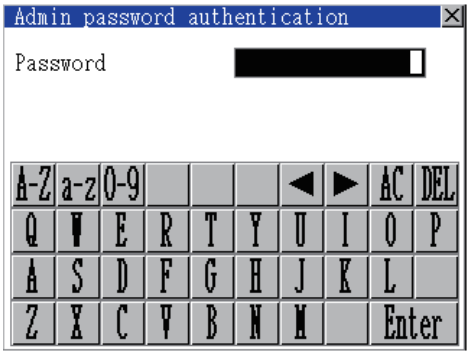
No.	Item	Description
(a)	Operator Name	The operator name to be edited is displayed or input an operator name to be added. (Up to 16 alphanumeric characters)
(b)	Operator ID	The operator ID to be edited is displayed or input an operator name to be added. (Setting range: 1 to 32766, Maximum number of registrations: 255)
(c)	Level	The operator security level to be edited is displayed or input an operator security level to be added. (0 to 15)
(d)	Password	Input a password.
(e)	Make a permanent password	Switches the setting of the item disabled and enabled. (☐: Disabled ☑: Enabled)
(f)	Use ext. auth. ID	Switches whether to use the external authentication ID. (☐: Not Used ☑: Used)
(g)	Ext.auth. ID	The external authentication ID is displayed or input an external authentication ID. (Fingerprint authentication ID setting range: numbers 1 to 7 digits, External authentication ID setting range: alphanumerics*1 4 to 32 digits) ☞ ■Function setting

*1 Since the key window is for hexadecimal format, the setting range can be input in the range of A to F or 0 to 9.

(4) Operator management operation



1. Touch [Operator management] in the operator setting menu.



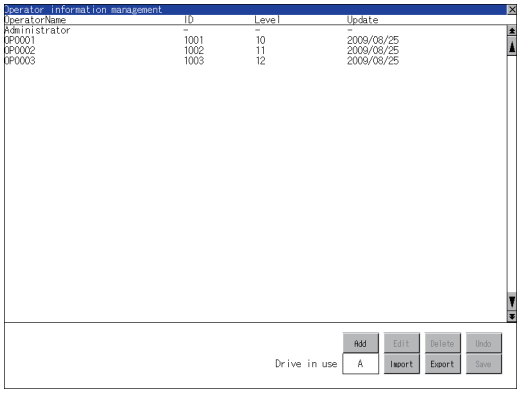
2. The Admin password authentication screen is displayed, and then input the administrator password.
Character types to be input can be changed with touching the following buttons.

   [A-Z]: Alphabet capital

   [a-z]: Alphabet small letter

   [0-9]: Numeric

   When the input is completed, touch the [Enter] key.



3. When the administrator password is correctly input, the Operator information management screen in displayed.
For operating operation switches, refer to the following.

   Add..... (a) Add operation

   Edit..... (b) Edit operation

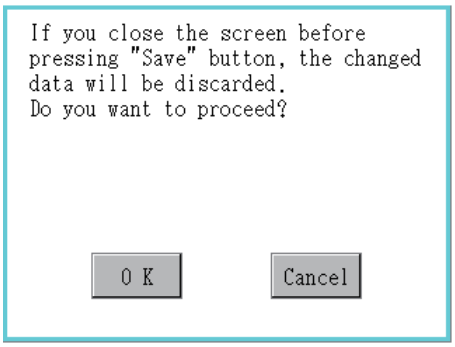
   Delete..... (c) Delete operation

   Undo..... (d) Undo operation

   Import..... (e) Import operation

   Export..... (f) Export operation

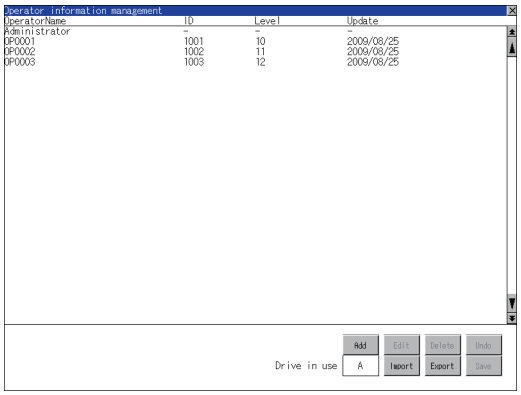
4. After all settings are completed, touch the [Save] button, and then the settings are saved.



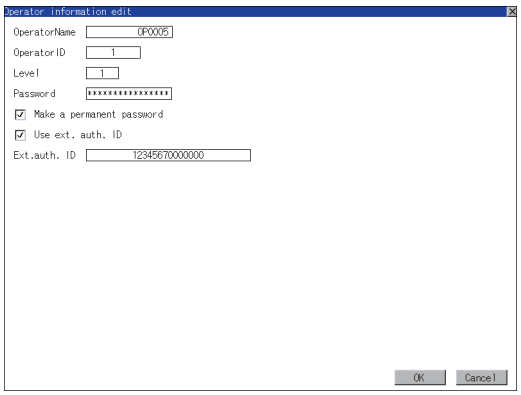
5. Touch the ☒ button without touching the [Save] button, and then the dialog box shown left is displayed.

(a) Add operation

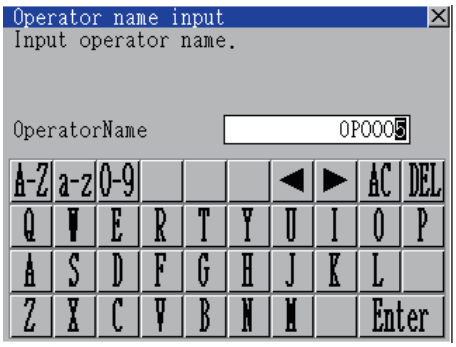
Add operator information to the GOT.



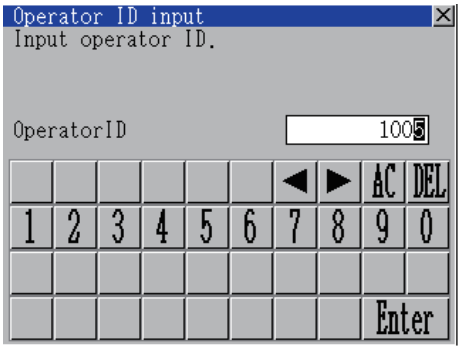
1. Touch the [Add] button.



2. The Operator information edit screen is displayed, and then touch an item to be edited.
   (a) OperatorName
   (b) OperatorID
   (c) Level
   (d) Password
   (e) Make a permanent password
   (f) Use ext. auth. ID
   (g) Ext.auth. ID

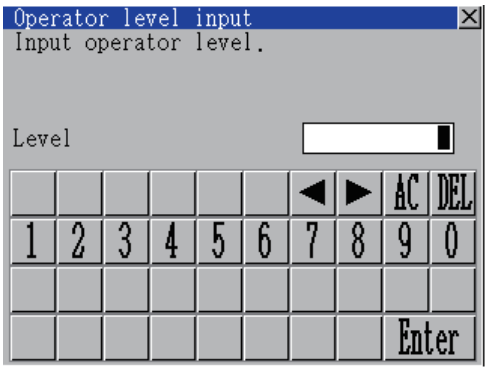


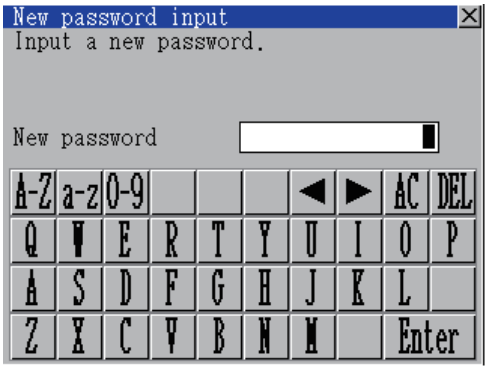
(a) Touch the OperatorName, and then the Operator name input dialog box is displayed. Input an operator name.
Character types to be input can be changed with touching the following buttons.
[A-Z]: Alphabet capital
[a-z]: Alphabet small letter
[0-9]: Numeric
When the input is completed, touch the [Enter] key.

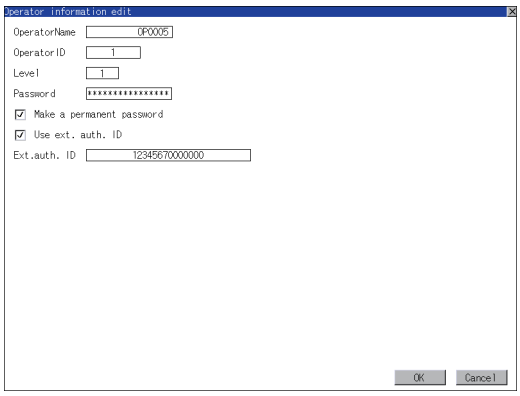


(b) Touch the OperatorID, and then the Operator ID input dialog box is displayed.
Input an operator ID.
When the input is completed, touch the [Enter] key.

(Continued to next page)







(c) Touch the level, and then the Operator level input dialog box is displayed. Input an operator level. When the input is completed, touch the [Enter] key.

When the level of the operator being login is changed during editing the operator information, a new level is not reflected until you log out of the GOT once and log in the GOT again.

(d) For changing passwords during editing, touch the password.
The New password input dialog box is displayed, and then input a password.
When the input is completed, touch the [Enter] key.

When the password input is completed, the New password input confirmation dialog box is displayed. Input the same password.

(e) For enabling the setting of [Make a permanent password], touch the check box for [Make a permanent password], and then the setting is switched.

☐: Disabled

☑: Enabled

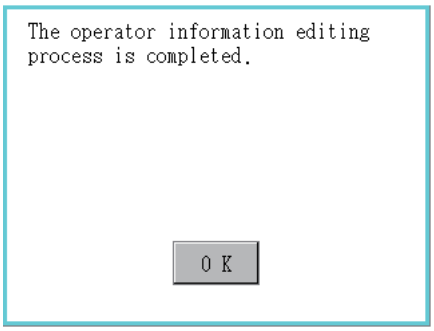
(f) For using the external authentication ID, touch the check box "Use ext. auth. ID" and switch the setting.

☐: The external authentication ID is not used.

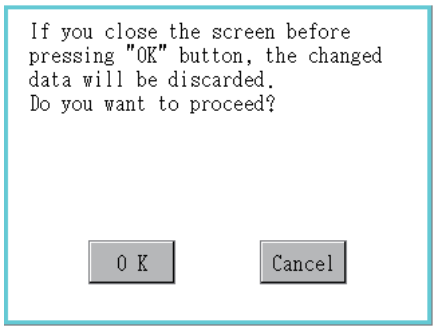
☑: The external authentication ID is used.

(g) Touch Ext.auth ID to display the external authentication ID input dialog box, and enter the external recognition ID.
When the input is completed, touch the [Enter] key.
When the authentication method is set to "Fingerprint auth" or "External auth (general)", the external authentication ID can be input with the external authentication device.

(Continued to next page)



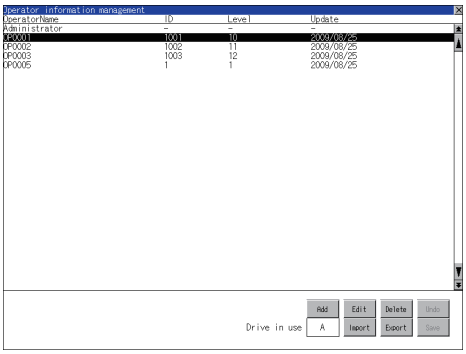
3. Touch the [OK] button after all items are input, and then the dialog box shown left is displayed and the input operator information is added.



4. Touch the [Cancel] button or the ☒ button, and then the dialog box shown left is displayed.

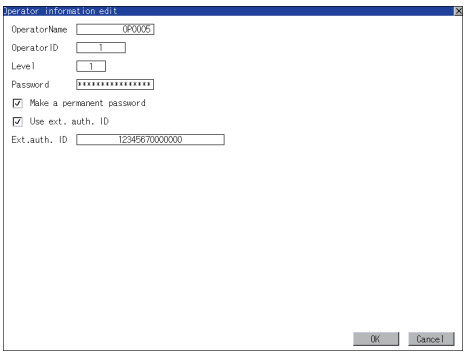
(b) Edit operation

Edit the operator information stored in the GOT.



1. Select the operator information to be edited with touching the operator information.

2. Touch the [Edit] button.

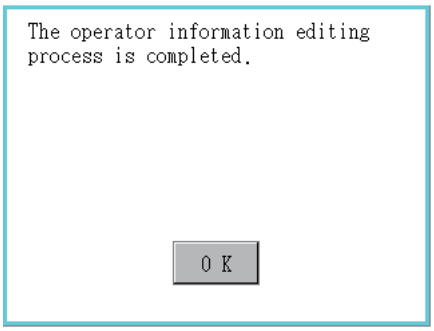


3. The Operator information edit screen is displayed, and then touch an item to be edited.
(a) Level
(b) Password
(c) Make a permanent password
(d) Use ext. auth. ID
(e) Ext.auth. ID

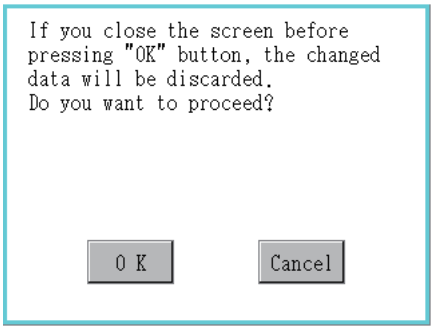
For how to edit operator information, refer to the following.

☞ (4) (a) Add operation

(Continued to next page)



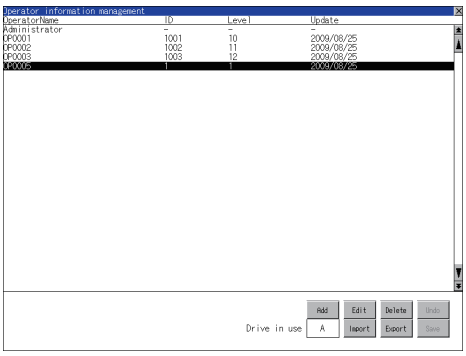
4. Touch the [OK] button after all items are input, and then the dialog box shown left is displayed and the input operator information is changed.



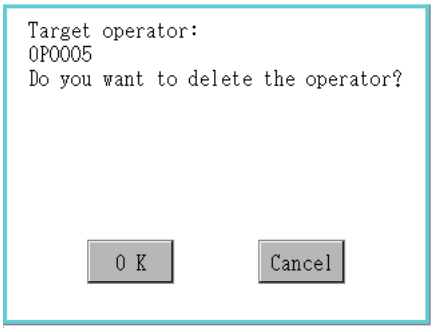
5. Touch the [Cancel] button or the ☒ button, and then the dialog box shown left is displayed.

(c) Delete operation

Delete the operator information stored in the GOT.



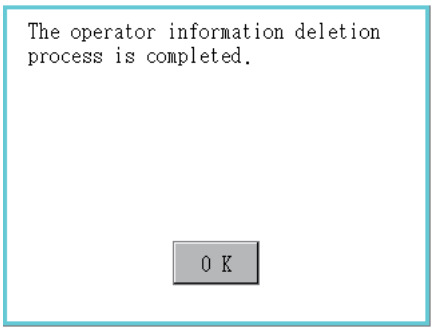
1. Select the operator information to be deleted with touching the operator information.



2. Touch the [Delete] button, and then the dialog box shown left is displayed.

Touch the [OK] button, and then the selected operator information is deleted.

Touch the [Cancel] button, and then the delete operation is canceled.

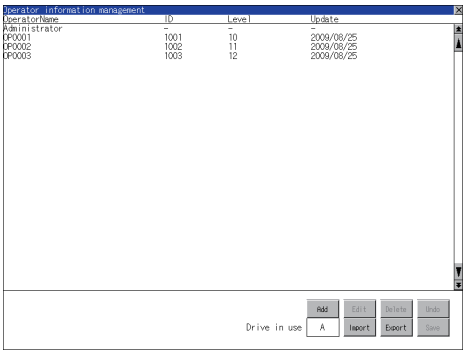


3. When the delete operation is completed, a completion dialog box is displayed.

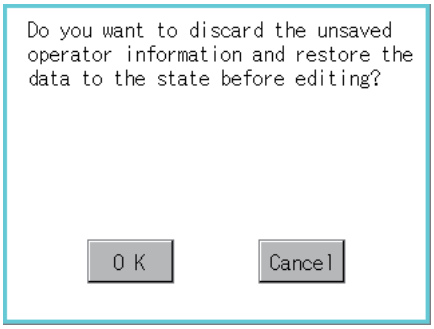
Touch the [OK] button, and then the dialog box is closed.

(d) Undo operation

Restore the current operator information to the previous saved one.



1. Touch the [Undo] button.



2. The dialog box shown left is displayed, and then touch the [OK] button.

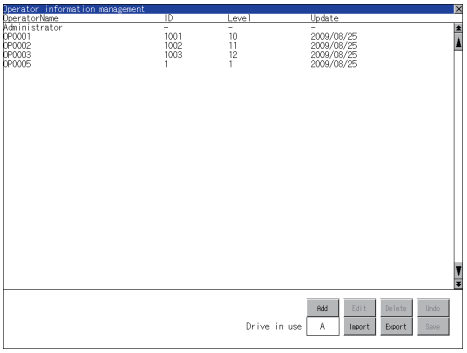
3. The Admin password authentication screen is displayed, and then input the administrator password.
Character types to be input can be changed with touching the following buttons.

[A-Z]: Alphabet capital

[a-z]: Alphabet small letter

[0-9]: Numeric

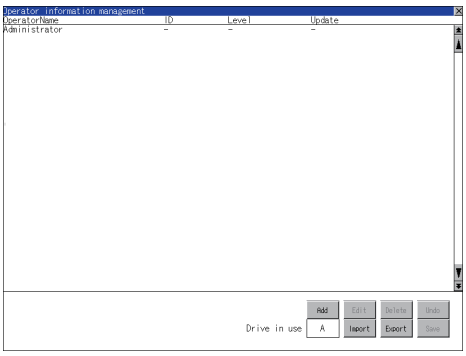
When the input is completed, touch the [Enter] key.



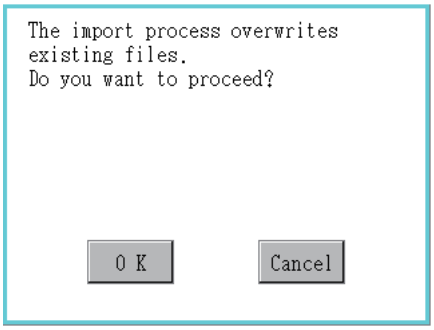
4. When the administrator password is correctly input, the current operator information is restored to the previous saved one.

(e) Import operation

Import the operator information that is already exported to a CF card to the GOT.



1. Touch the [Import] button.



2. The dialog box shown left is displayed.

   Touch [OK] button, and then the Admin password authentication screen is displayed. Input the administrator password.

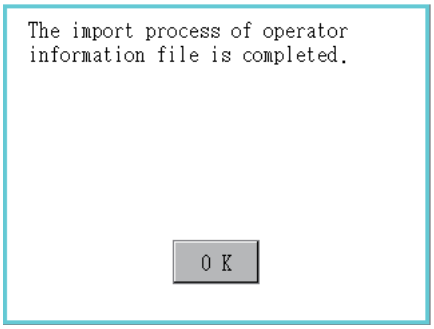
   Character types to be input can be changed with touching the following buttons.

   [A-Z]: Alphabet capital

   [a-z]: Alphabet small letter

   [0-9]: Numeric

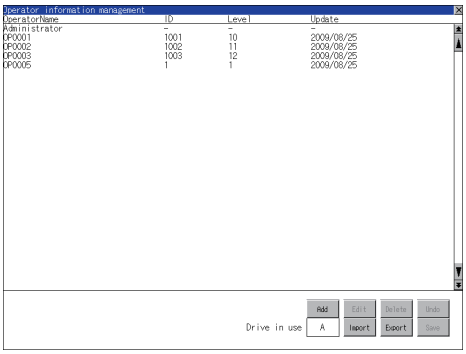
   When the input is completed, touch the [Enter] key.



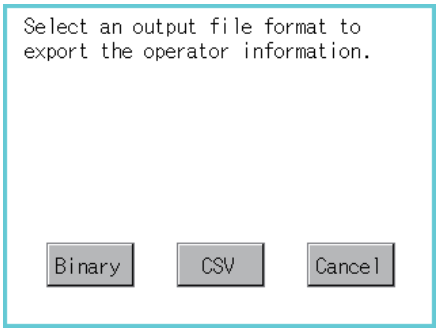
3. When the administrator password is correctly input, the dialog box shown left is displayed and the operator information stored in a CF card is imported to the GOT.

(f) Export operation

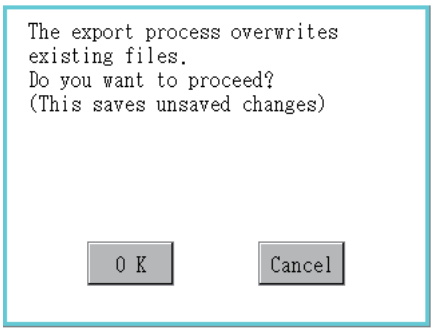
Export the operator information stored in the GOT to a CF card.



1. Touch the [Export] button.



2. The dialog box on the left is displayed.
Touch the following buttons according to the output format for the file.
- Binary file : [Binary] button
- CSV file : [CSV] button



3. The dialog box shown left is displayed.

Touch [OK] button, and then the Admin password authentication screen is displayed. Input the administrator password.

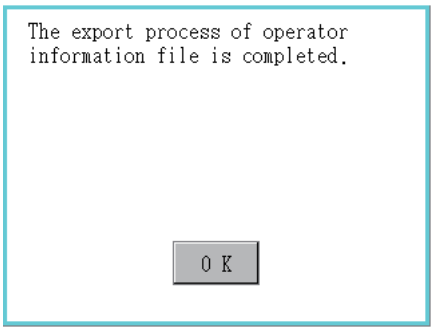
Character types to be input can be changed with touching the following buttons.

[A-Z]: Alphabet capital

[a-z]: Alphabet small letter

[0-9]: Numeric

When the input is completed, touch the [Enter] key.



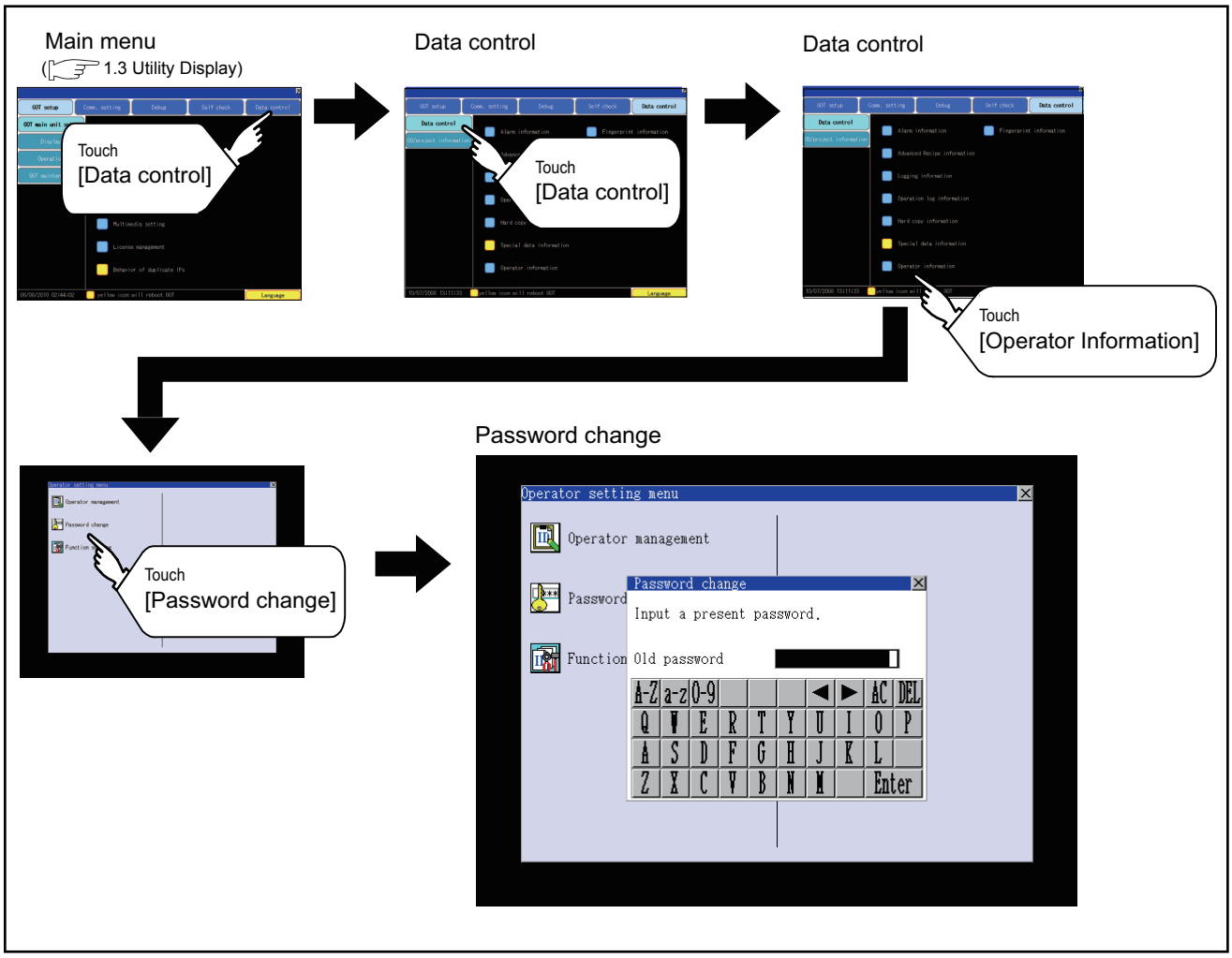
4. When the administrator password is correctly input, the dialog box shown left is displayed and the operator information stored in the GOT is exported to a CF card.
(file name: AUTHINF.G1U)

■ Password change

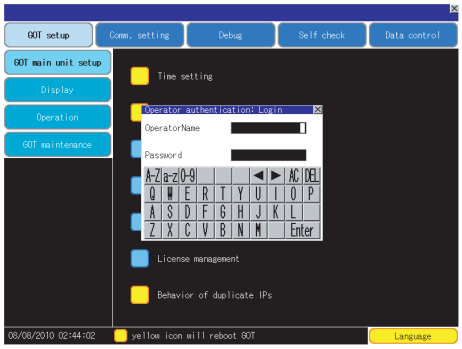
(1) Password change function

The passwords to be used for the operator authentication can be changed.
For the password change, log into the GOT in advance with the operator name corresponding to the password to be changed.

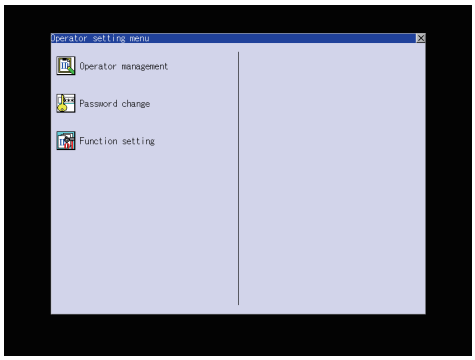
(2) Display operation of password change



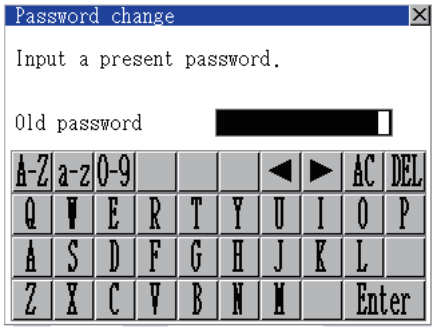
(3) Password change operation



1. Log into the GOT with the operator name corresponding to the password to be changed on the Main Menu screen for the utility.



2. Touch [Password change] in the operator setting menu, and then the Password change dialog box is displayed.



3. Input the current password on the Password change dialog box.

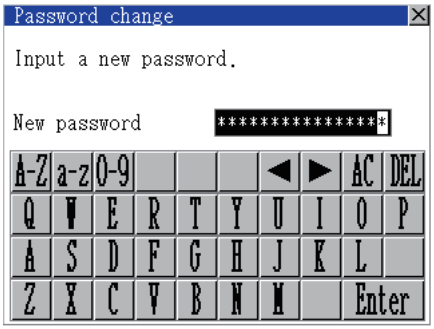
   Character types to be input can be changed with touching the following buttons.

   [A-Z]: Alphabet capital

   [a-z]: Alphabet small letter

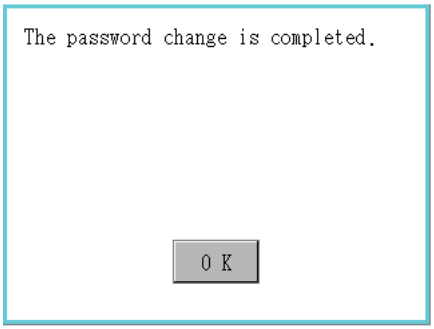
   [0-9]: Numeric

   When the input is completed, touch the [Enter] key.



4. Input a new password.

5. After inputting a new password, input the new password again.



6. When the new password is correctly input, the dialog box shown left is displayed and the password is changed.

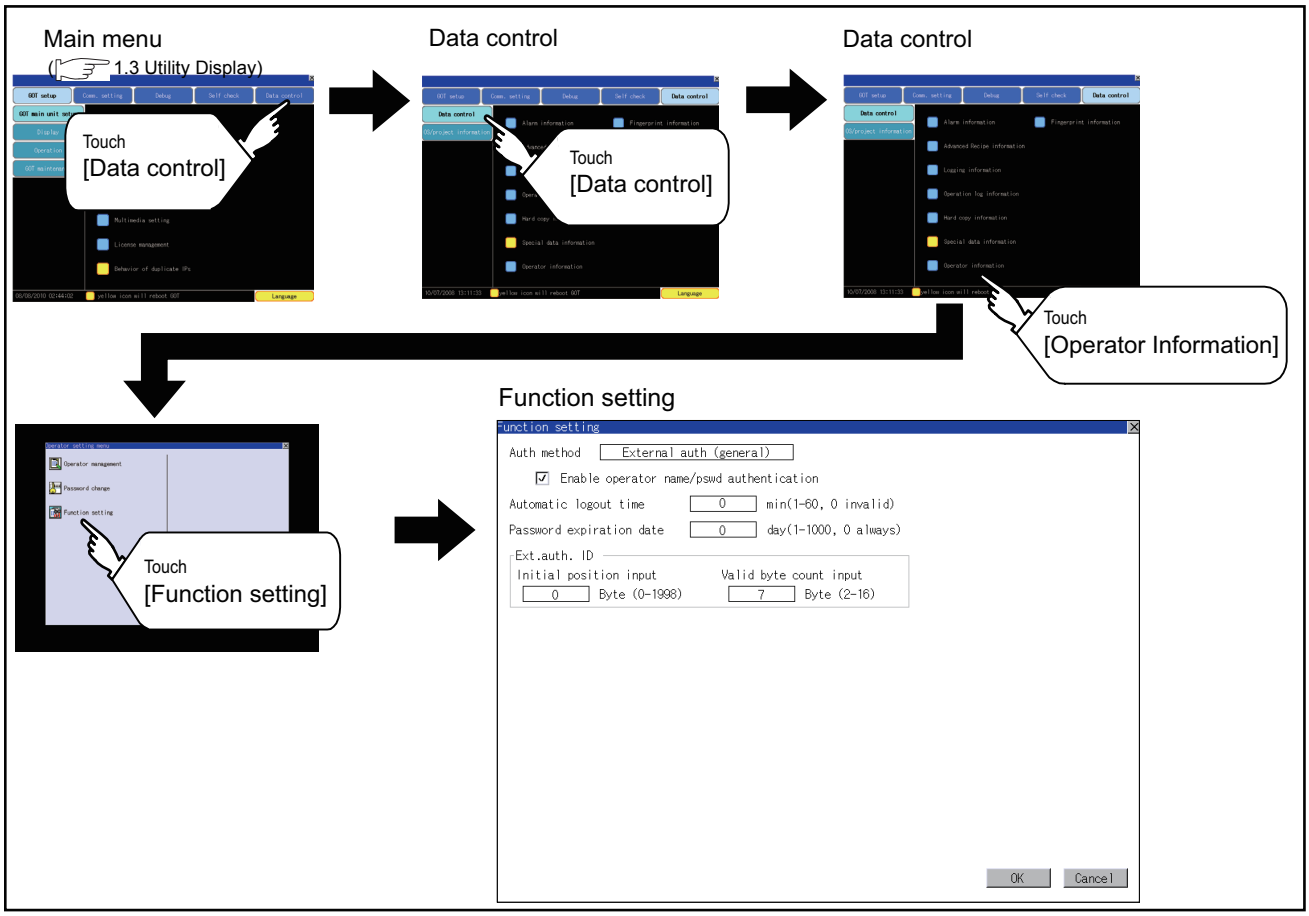
■ Function setting

(1) Function setting function

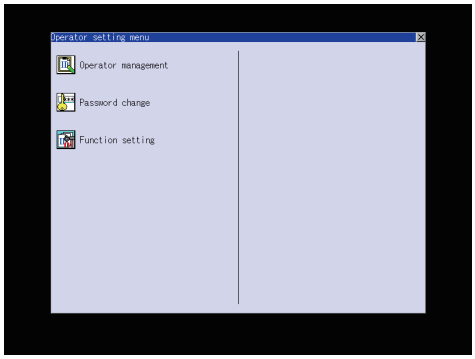
The functions for the operator information can be set.
The following items can be set.

Items	Description	For GT Designer2	For GT Designer3	Reference
Automatic logout time	The time from when the last time the GOT is operated until when you automatically log out of the GOT can be set. (1 to 60 minutes, 0 is invalid.)	○	○	6-95
Auth method	The authentication method can be switched. ("Operator name + password", "External auth (general)", "Fingerprint auth") When [External auth (general)] or [Fingerprint authentication] is selected, the check box for [Operator name + password] is displayed.	○	○	6-95
Password expiration date	Set the item for regularly changing the password to be used for the operator authentication. (1 to 1000 days, 0 is invalid.) When the password is out of date after setting the password, the GOT requests the password change.	○	○	6-96
Initial position input	Set the initial position input (byte count) of external authentication ID from among the data read from the external authentication device. (0 to 1998 bytes)	○	○	6-96
Valid byte count input	Set the valid byte count for external authentication ID. (2 to 16 bytes)	○	○	6-96

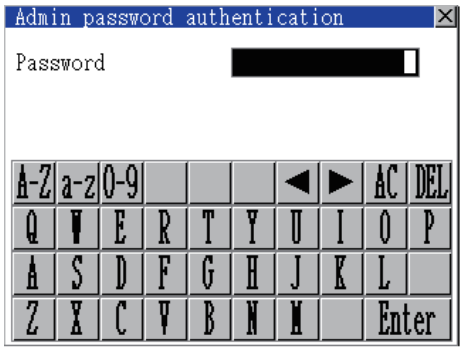
(2) Display operation of function setting



(3) Function setting operation



1. Touch [Function setting] in the operator setting menu, and then the Admin password authentication dialog box is displayed.



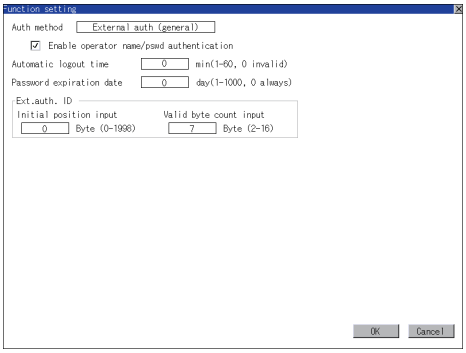
2. Input the administrator password.
Character types to be input can be changed with touching the following buttons.

[A-Z]: Alphabet capital

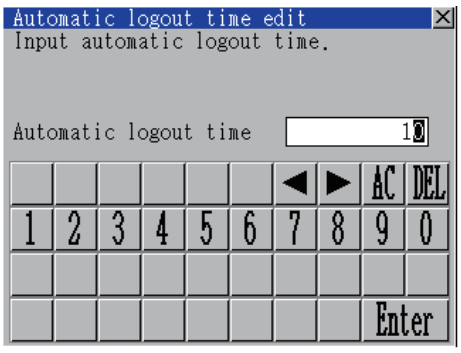
[a-z]: Alphabet small letter

[0-9]: Numeric

When the input is completed, touch the [Enter] key.



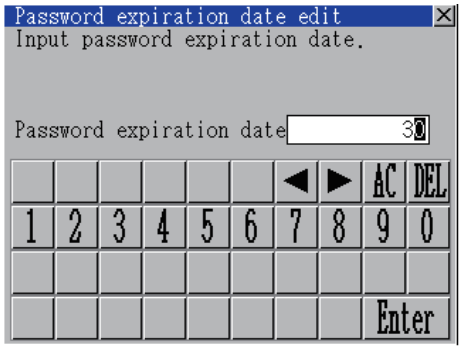
3. When the administrator password is correctly input, the Function setting screen in displayed.
Touch an item to be set.
(a) Automatic logout time
(b) Auth method
(c) Password expiration date
(d) Initial position input
(e) Valid byte count input



(a) Touch [Automatic logout time], and then the Automatic logout time edit dialog box is displayed. Input the time.
When the input is completed, touch the [Enter] key.

(b) Authentication method
Switch the authentication method.
Touch the item to switch the display between [Operator name + password] → [External auth (general)] → [Fingerprint auth] → [Operator name + password].
When [External auth (general)] or [Fingerprint authentication] is selected, the check box for [Operator name + password] is displayed.
If the check box is selected, the login is also enabled with [Operator name + password].

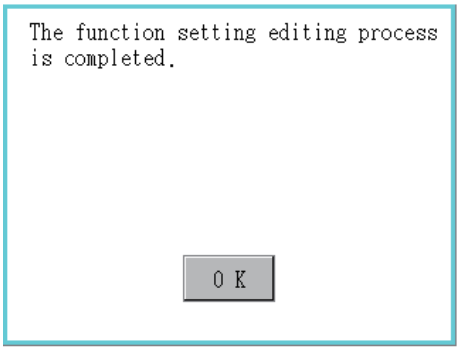
(Continued to next page)



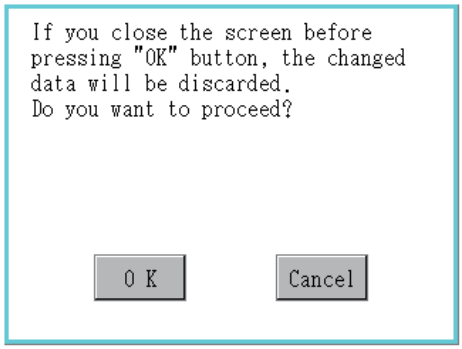
(c) Touch [Password expiration date], and then the Password expiration date edit dialog box is displayed. Input the expiration date.
When the input is completed, touch the [Enter] key.

(d) Initial position input
Set the initial position input (byte count) of external authentication ID from among the data read from the external authentication device.

(e) Valid byte count input
Set the valid byte count for external authentication ID.
(Only available when the external authentication (general) is set as the authentication method.)



4. Touch the [OK] button after all items are input, and then the dialog box shown left is displayed and the input setting is saved.



5. Touch the ☒ button without touching the [OK] button, and then the dialog box shown left is displayed.

6.2.8 Fingerprint information

For executing the operator management using the fingerprint unit, fingerprint information must be registered to the fingerprint unit.
This section describes how to get a fingerprint ID from the fingerprint information of the utility function.
Refer to the following manual for details of drawing settings.

•GT Designer3 Version1 Screen Design Manual (Fundamentals)
(4.7 Security Setting)
•GT Designer2 Version☐ Screen Design Manual (3.5 Security Setting)

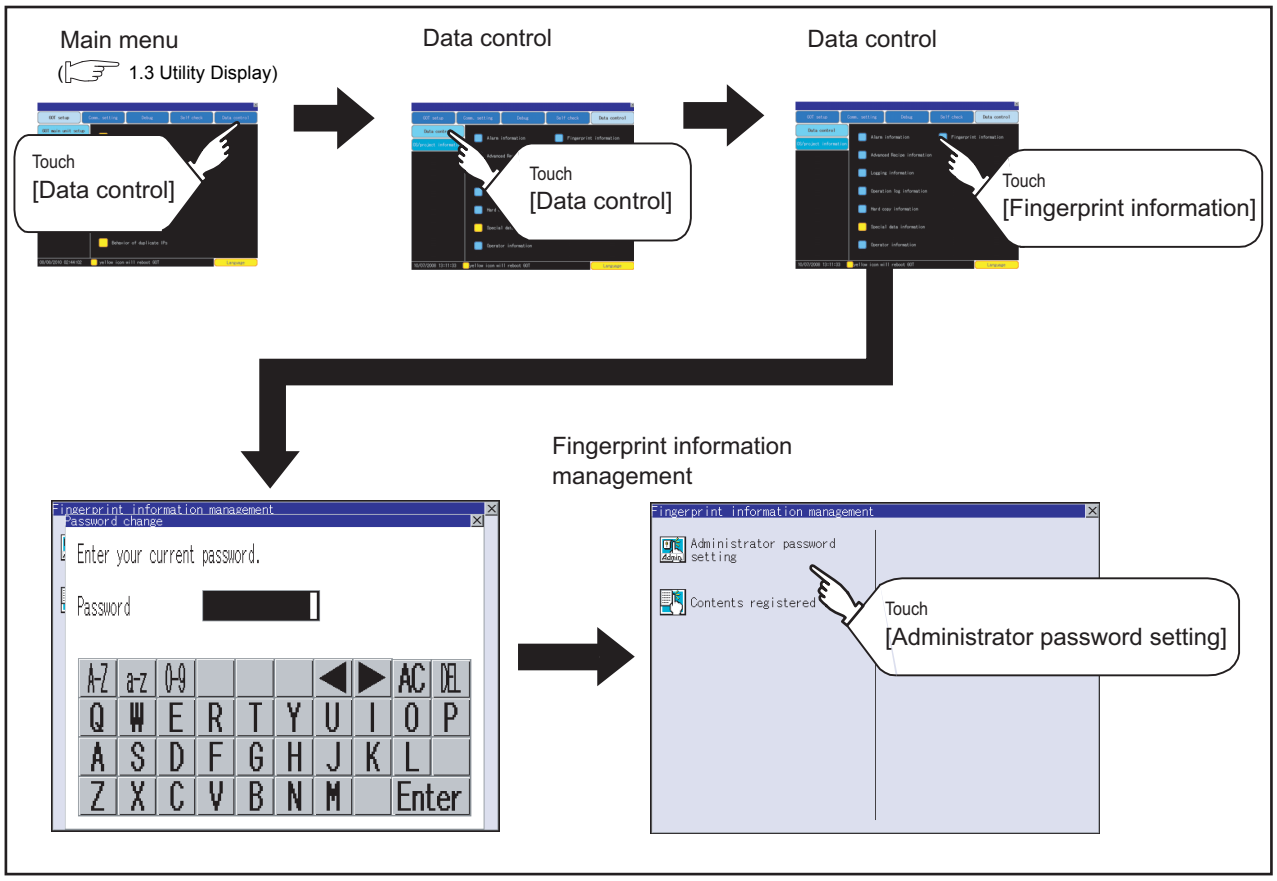
■ Administrator password setting

(1) Administrator password setting function

For registering or deleting fingerprint IDs, the administrator password must be set.

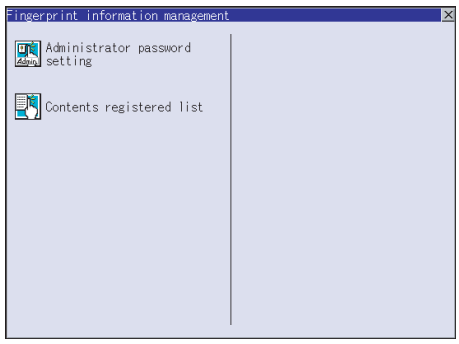
(2) Administrator password setting display operation

When the administrator password is not set, the password input window is displayed before the selection of the administrator password setting, and the setting for password is required.

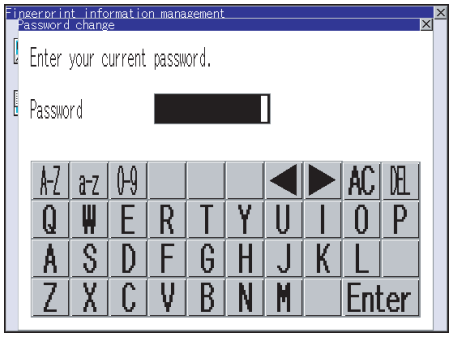


(3) Administrator password setting operation

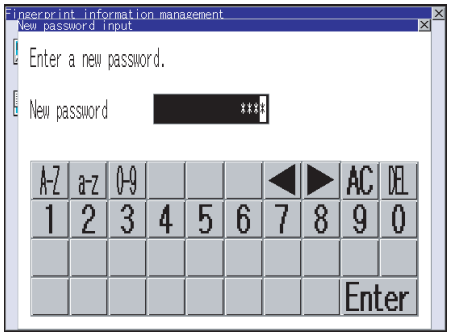
Set the administrator password for fingerprint ID.



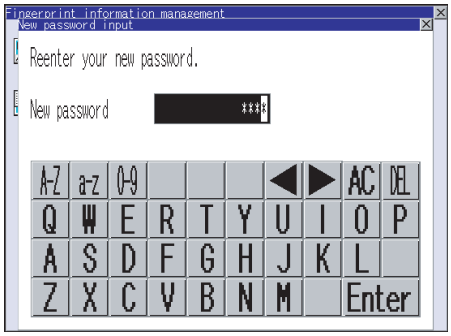
1. Touch [Administrator password setting] in the Fingerprint information management screen.



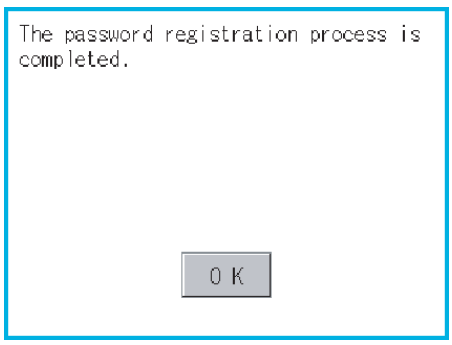
2. The dialog box shown left is displayed.
Input the pre-registered administrator password and touch the [Enter] key.
(Up to 16 alphanumeric characters)
Touch the ⌧ key to return to the [Fingerprint information management] screen.



3. Touch the [Enter] key to display the dialog box shown left.
Input a new administrator password and touch the [Enter] key.
(Up to 16 alphanumeric characters)
Touch the ⌧ key to return to the [Fingerprint information management] screen.



4. Touch the [Enter] key to display the dialog box shown left.
Input a new administrator password again and touch the [Enter] key.
(Up to 16 alphanumeric characters)
Touch the ⌧ key to return to the [Fingerprint information management] screen.



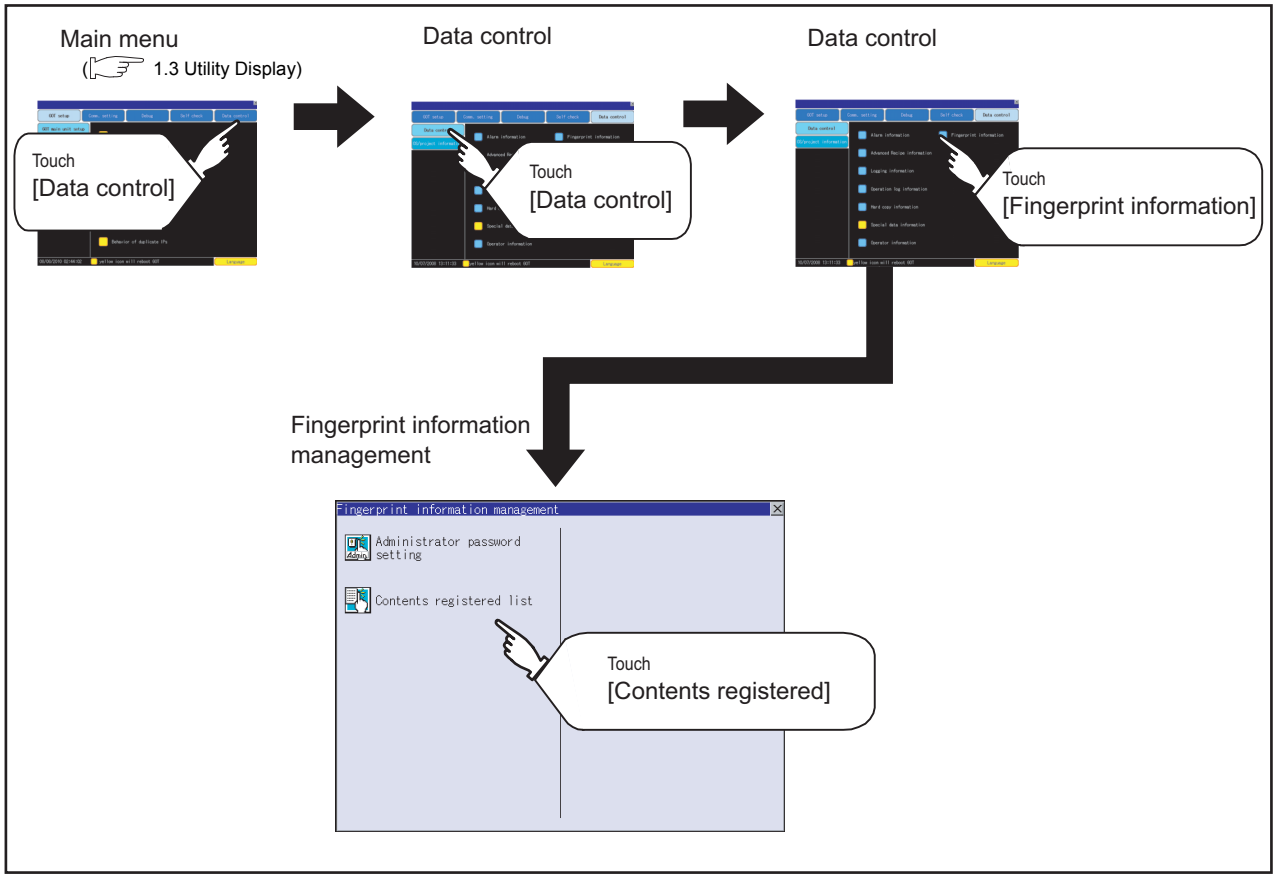
5. When the password is input correctly, the data is updated with the new administrator password, and the dialog box shown left is displayed.
Touch the [OK] button to return to the [Fingerprint information management] screen.

■ Contents registered list

(1) Functions of Contents registered list

The operator fingerprint ID used in the fingerprint authentication can be added or deleted.

(2) Display operation of Contents registered list

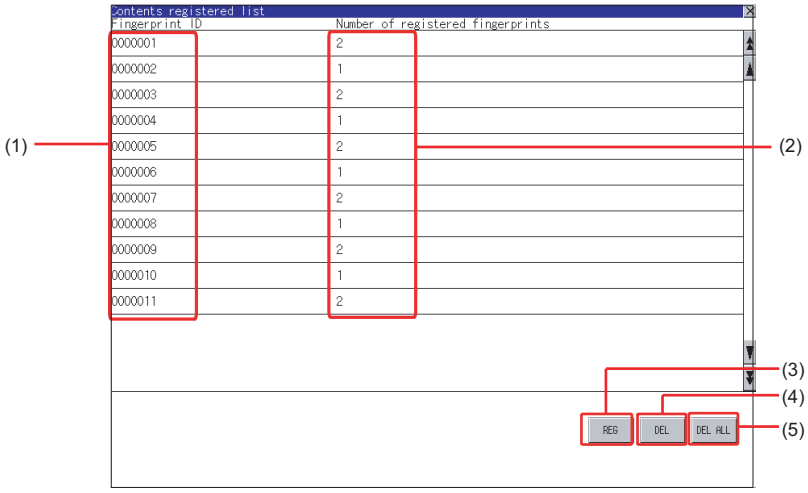


(3) Display example of Contents registered list

(a) Contents registered list screen

Touch [Contents registered list] in the Fingerprint information management screen to display the administrator password authentication screen.

After the password, which is set in [Administrator password setting], is correctly input, the following screen is displayed.

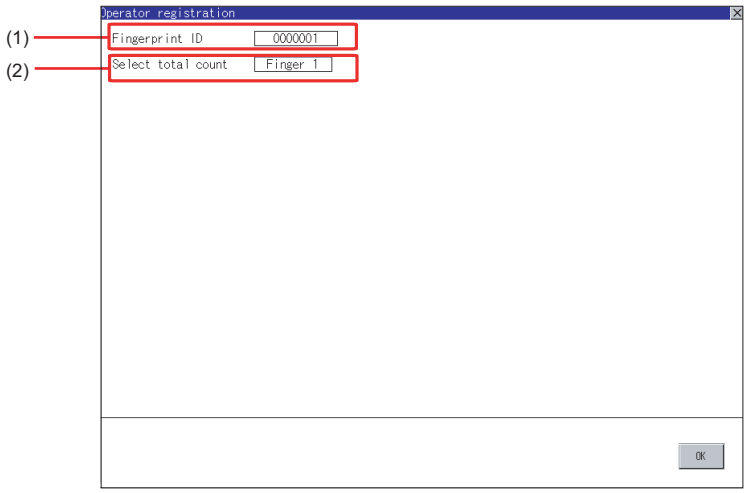


Number	Item	Description
(1)	Fingerprint ID	Displays the fingerprint ID. (Maximum number of registrations: 100)
(2)	Number of registered fingerprints*1	The number of fingerprints registered in the fingerprint ID is displayed.
(3)	REG	Key for registering a fingerprint ID
(4)	DEL	Key for deleting a fingerprint ID
(5)	DEL ALL	Key for deleting all the fingerprint ID

*1 Two fingerprints can be registered for each fingerprint ID.
If two different fingerprints are registered for each operator, the fingerprint authentication can be executed even if one of the registered fingers cannot be used due to injury, etc.

(b) Operator registration screen

In the Contents registered list screen, touch the [REG] button to display the following screen.



Number	Item	Description
(1)	Fingerprint ID	The fingerprint ID is displayed or input a fingerprint ID. (Numbers: 1 to 7 digits)
(2)	Select total count	Select "Finger 1" or "Finger 2" for the fingerprint ID.

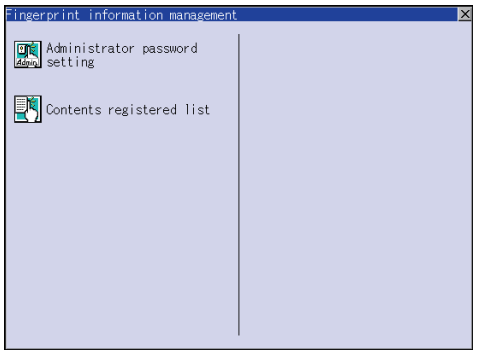
(4) Operation of Contents registered list

For logging into the GOT using the fingerprint unit, the fingerprint information of the operator must be registered in the operator information.
Refer to the following for details of operator information.

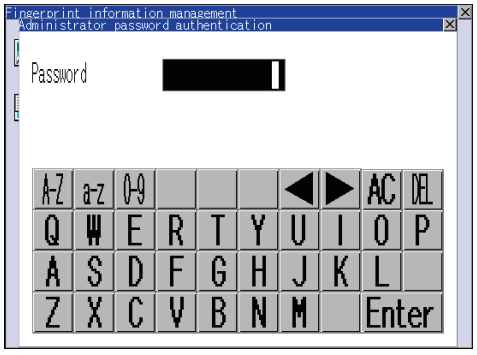
6.2.7 Operator information

Refer to the following for precautions when registering fingerprints.

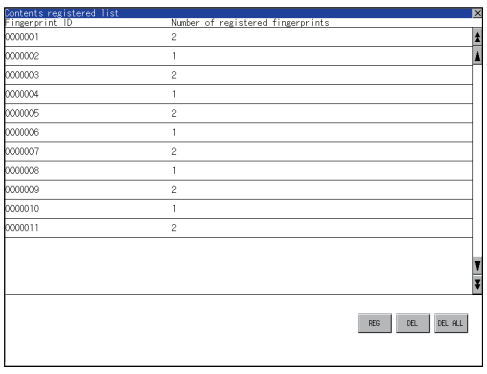
(2) For registering operator



1. In the fingerprint information management, touch the [Contents registered list].



2. The administrator password authentication screen is displayed.

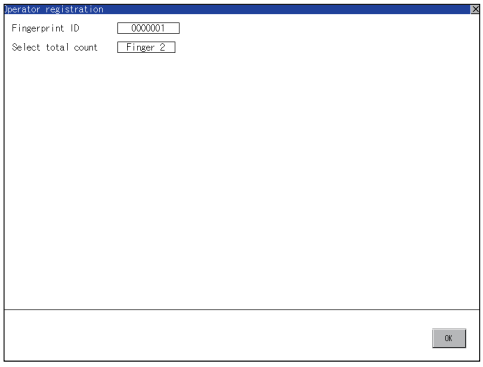


3. After the administrator password is correctly input, a list of fingerprint IDs registered in the fingerprint unit is displayed.

4. To register a fingerprint ID, touch the [REG] button.
Touch the [DEL] button after selecting a fingerprint ID to delete the selected ID.
Touch the [DEL ALL] button to delete all the registered fingerprint IDs.

(Continued to next page)

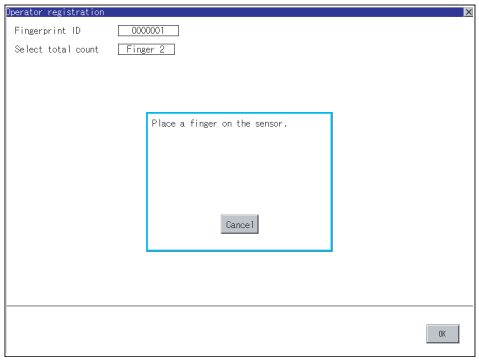
5. Input the fingerprint ID of the operator to be registered.
(Input the same ID as the external authentication ID registered in the operator information edit screen.)



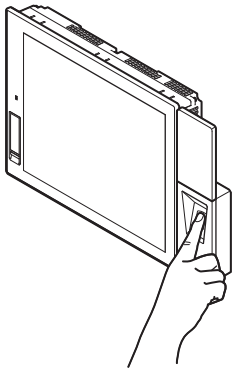
6. Touch the setting item of [Select total count] to switch in order of [Finger 1] → [Finger 2] → [Finger 1].

7. Enter all the items, and touch the [OK] button.

8. If the ☒ button is touched before the [OK] button is touched, the ID is not registered, and the screen is returned to the Contents registered list screen.



9. Touch the [OK] button, follow the instruction, which is displayed in the dialog box, and register the fingerprint of the operator to be registered.
Touch the [Cancel] button to return to [Contents registered list].
After [Finger 2] is selected and one fingerprint is registered, the screen is returned to [Contents registered list] even if the [Cancel] button is touched for registering the second fingerprint.



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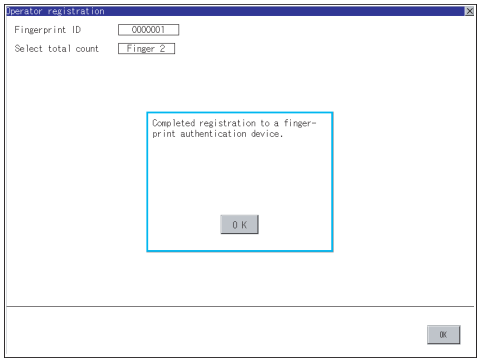
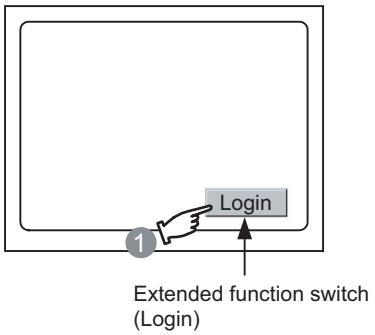


10. After registering to the fingerprint unit is completed, the registration completion notice dialog box is displayed.
Touch the [OK] button to return to the [Contents registered list] screen.

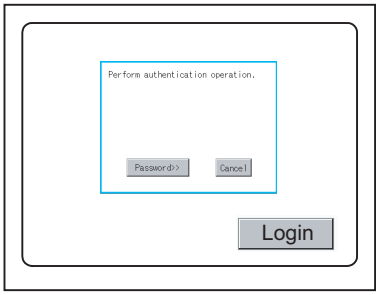
Authentication operation

This section describes how to log into the GOT using the fingerprint authentication.
For details of the procedures for creating an extended function switch that displays a login button on the user-created screen, refer to the following manual.

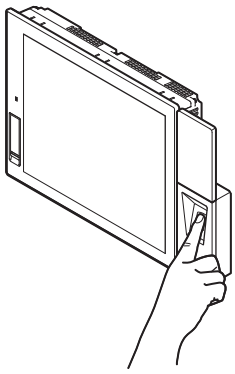
☞ •GT Designer3 Version1 Screen Design Manual (Functions) (2.6 Setting Special Function Switch)
•GT Designer2 Version□ Screen Design Manual (6.2.5 Setting items of special function switch)



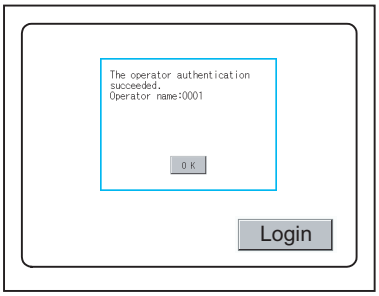
1. Touch the [Login] button created in the user-created screen.



2. The dialog box shown left is displayed.
   Touch the [Password] button to display the login screen of [Operator name + password].
   For the display method of the [Password] button, refer to the following.
   ☞ 6.2.7 Operator information
   Touch the [Cancel] button to return to the screen in step1.



3. Put the registered finger on the fingerprint unit.

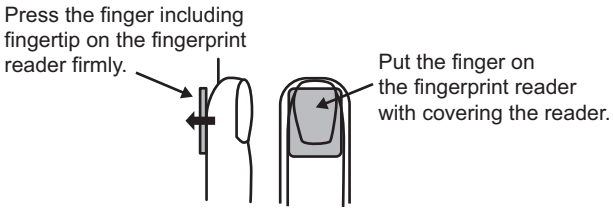


4. When the fingerprint is correctly recognized, the dialog box shown left is displayed.
   Touch the [OK] button to return to the user-created screen.

■ Precautions

(1) For installing fingerprint unit

- The fingerprint unit complies with the protective structure IP4X.
  The unit cannot be used with wet fingers or oil fingers.
  The protective structure of the fingerprint unit differs from that of the GOT (IP67).
  When using the GOT, do not use with wet fingers or oil fingers.
- Use the fingerprint unit under the brightness with the external light of 5000Lx or less.
- Do not pull the cable.
  Doing so can cause malfunction or failure of the module.
- The fingerprint unit is a consumable product.
  Check the unit for scratch, damage or dirt at regular intervals, and replace with new one if necessary.
- To be recognized as a fingerprint, put the finger including fingertip on the fingerprint reader firmly with covering the reader as shown in the following figure.



- The following shows corrective actions when the fingerprint unit operates incorrectly.

Troubles	Causes	Corrective actions
When the fingerprint is registered, the fingerprint reader does not light brightly even when the finger is put on the reader.	Dry finger	Moisten the finger with breath and put the finger again.
	Dirty finger	Remove stains and put the finger again.
When the fingerprint is registered, the fingerprint reader remains lit brightly.	The finger is not put on firmly.	Press the finger on the fingerprint reader firmly.
	Thin finger	Change the registered finger to the middle finger or first finger.
When the fingerprint is recognized, the fingerprint is not recognized by the fingerprint reader unless the finger is put on the reader a number of times.	The unclear fingerprint image is registered.	Change the registered fingerprint.

(2) For registering operator

- When selecting [Finger 2] in the [Select total count] in ■Contents registered list (4) of this section, register two fingerprints consecutively.
  To execute [Finger 2], do not register the same finger twice.
  It may cause malfunction of the device.

(3) For registering operator again

- When the fingerprint registration is completed, another fingerprint cannot be registered.
  To register another fingerprint, delete the existing fingerprint ID, and start to register another fingerprint ID.

6.3 OS/Project Information

6.3.1 OS information

■ Function of OS information

Each file name/folder name of BootOS and OS (Standard monitor OS, communication driver and optional function OS) by which each drive (A: Standard CF card, B: Extended memory card, C: Built-in flash memory, E: USB memory) holds can be displayed in lists.
Installation and uploading of the files are also possible.

Function	Description	For GT Designer2	For GT Designer3	Reference
Information display of files and folders	Displays the kind, name, data size, creation date and time of the file or folder.	○	○	■Display example of OS information ■Operation of OS information
Install	All OS files written in the A drive (Standard CF card), B drive (Extended memory card) and E drive (USB drive) can be installed in the C drive (Built-in flash memory).	○	○	(2) Installation operation
Upload	All OS files in the C drive (Built-in flash memory) can be uploaded to the A drive (Standard CF card), B drive (Extended memory card) and E drive (USB drive).	○	○	(3) Upload operation
Property display	Displays the property (file name, data size, type, version and creation date) of the file.	○	○	(4) Property display operation
Data check	Data check of files is possible.	○	○	(5) Data check operation

POINT

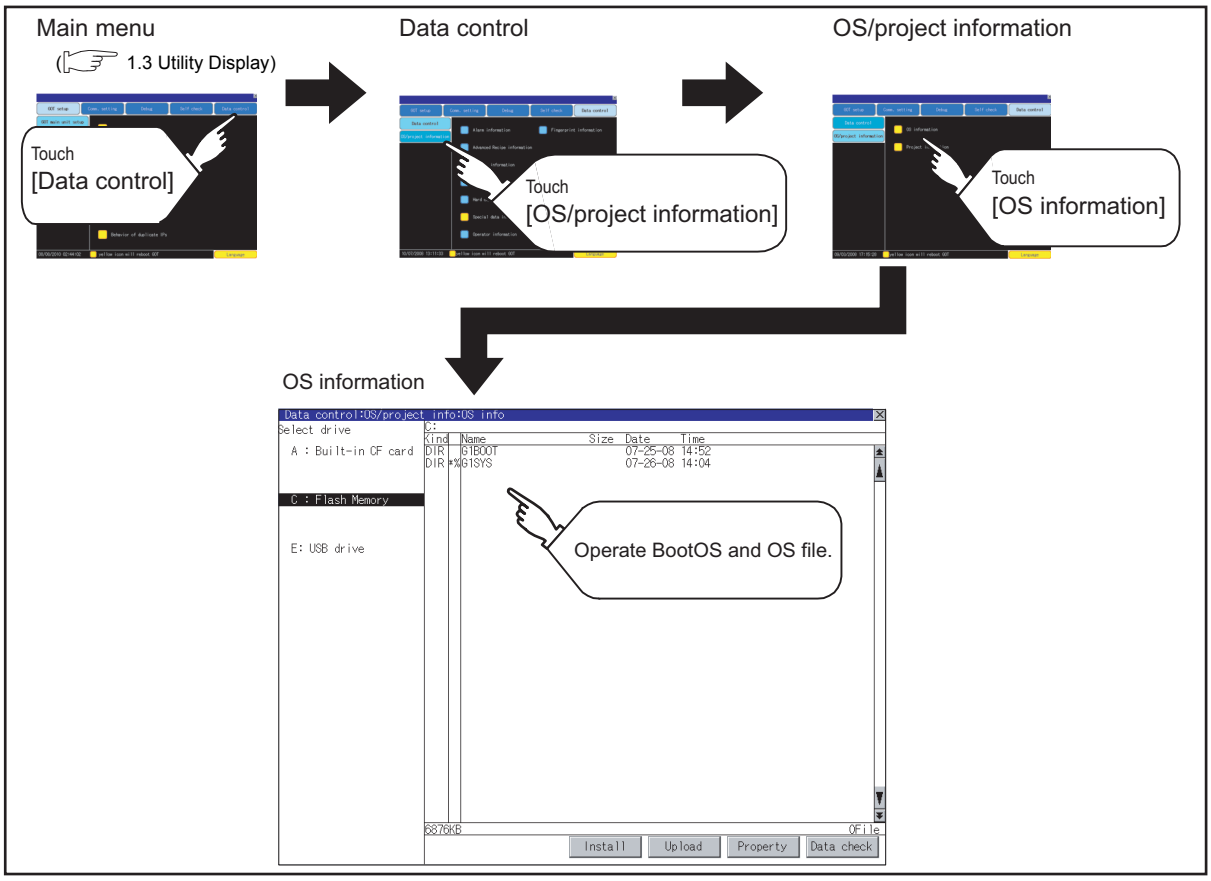
(1) Precautions for installing OS

Installing Boot OS and OS will delete project data in the GOT.
After installing them, install or download necessary data again.

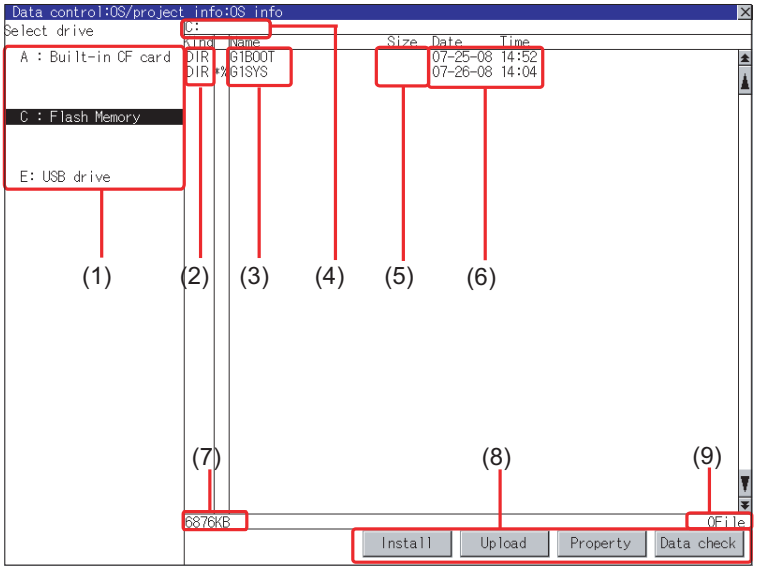
(2) Precautions for operating OS files

When the OS boot drive is set to [A: Standard CF Card], installing and uploading OS files are not available.

■ Display operation of OS information



■ Display example of OS information



Number	Item	Description
(1)	Select drive	The target drive which displays file or folder can be selected. When the CF card is not installed, [A: Built-in CF Card] / [B: Memory card] are not displayed. If the USB memory is not installed, [E: USB drive] is not displayed.
(2)	Kind	Indicates whether the displayed name is for file or folder. In case of file, displays the extension; in case of folder, displays "DIR".
(3)	Name	The file name or folder name which is stored in the selected drive or folder is displayed. When the file name or folder name exceeds 20 characters, the exceeding characters (the 21th character or after) are not displayed.
(4)	Path name	The path name of the currently displayed drive/folder is displayed.
(5)	Size	Displays the size of the file displayed in Name.
(6)	Date and time	The date and time when each file was created are displayed.
(7)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection. (Only the size in use is displayed when selecting the C drive.)
(8)	Operation switch	Execution switch of each function.
(9)	Number of folders and files	Displays the total number of the displayed files and folders.

HINT

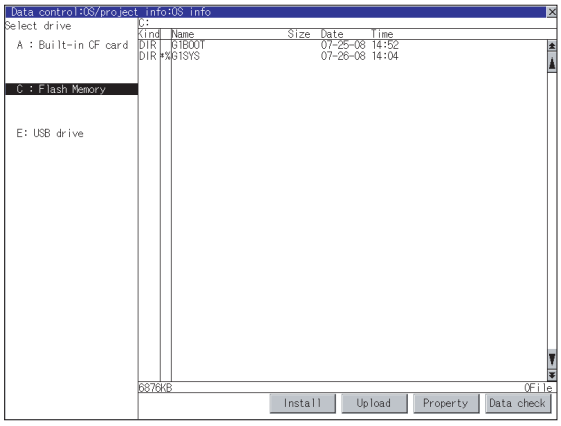
Displayed folders and files

For the folders and files displayed, refer to the following.

☞6.1.4 Display file

■ Operation of OS information

(1) Display operation of OS information



1. If touch a drive in [Select drive], the information of the first folder of the touched drive is displayed.
2. If touch a folder name, the information of the touched folder is displayed.
3. If touch a folder name of ". .", the information of the folder in one higher hierarchy is displayed.
4. If touch ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.
   If touch ⏫ ⏬ button, the screen scrolls up/down by one screen.
5. If touch a file name, the touched file name is selected and inverted.
6. Refer to the following for operation of installation, upload, property, data check.
   Installation.....☞(2) Installation operation
   Upload.....☞(3) Upload operation
   Property.....☞(4) Property display operation
   Data check.....☞(5) Data check operation
7. Touching ☒ button closes the screen.

(2) Installation operation

BootOS and OS which are written in the A drive (Standard CF card), B drive (Extended memory card) or E drive (USB drive) can be installed in GOT.
(This item explains using the A drive.)

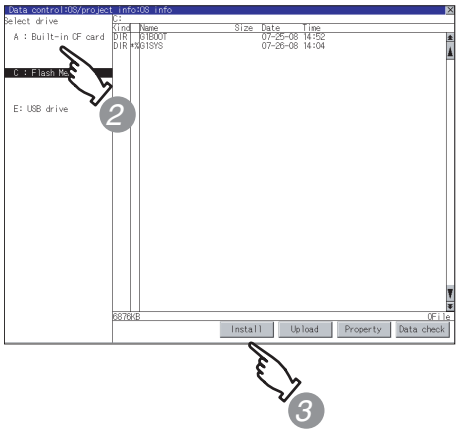
1. Install the CF card to which the BootOS or OS to install is written to the GOT.
   Refer to the following for inserting/ removing method of CF card.

   ☞ (Hardware)
   8.3.2 ■ CF card

   (Hardware)
   8.5.2 ■ Install USB peripheral devices

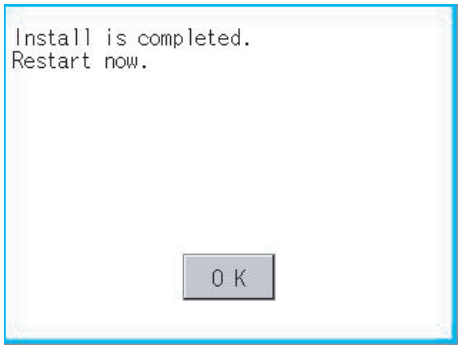
2. Touch [A: Built-in CF Card] for drive selection.

3. Touching [Install] button starts the install.



4. When the installation is completed, the dialog box shown left is displayed.

   GOT restarts if touch [OK] button.



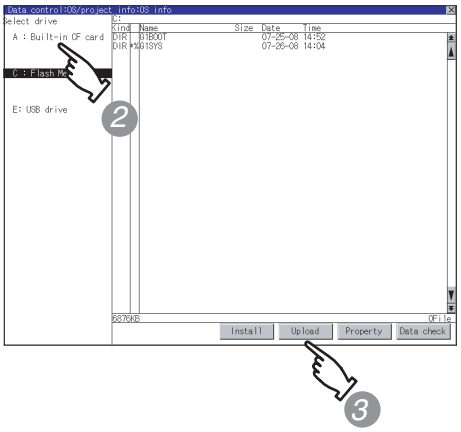
(3) Upload operation

BootOS and OS in the C drive (Built-in flash memory) can be uploaded to the A drive (Standard CF card), B drive (Extended memory card) and E drive (USB drive).
The CF card after uploading can be used for installing the OS on another GOT.

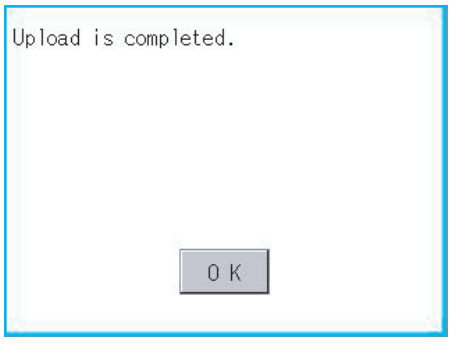
7. INSTALLATION OF COREOS, BOOTOS AND STANDARD MONITOR OS

(This item explains using the A drive.)

1. Install the CF card used as the uploading destination to GOT.
   Refer to the following for inserting/removing method of CF card.
   (Hardware)
   8.3.2 ■ CF card
   (Hardware)
   8.5.2 ■ Install USB peripheral devices
2. Touch [A: Built-in CF Card] of [Select drive].
3. Touching [Upload] starts the uploading.

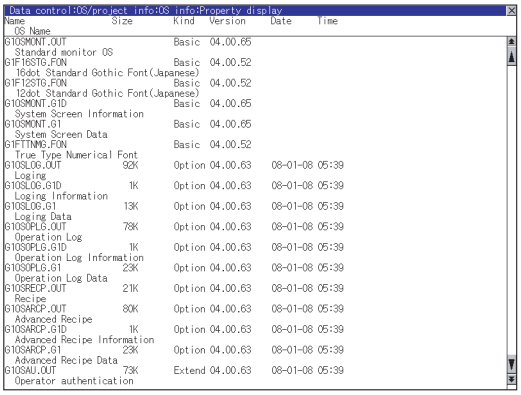


4. When the upload is completed, the dialog box shown left is displayed.
   Touching [OK] closes the dialog box.



(4) Property display operation

Displays the property of the file stored in the selected folder



1. If touch [Property] button after selecting the property displaying target folder, the Property display shown left is displayed.
In Property display, the following information is displayed for each file selected by step1.

Item	Description
Name	Displays the file name.
Size	Displays the file size.
Type	Displays the following items according to the file type. Boot: BootOS Basic: Standard monitor OS Extend: Extended function OS Option : Optional function OS Comm. : Communication driver
Version	Displays the version of BootOS and OS.
Date and time	Displays the date and time of the file creation.

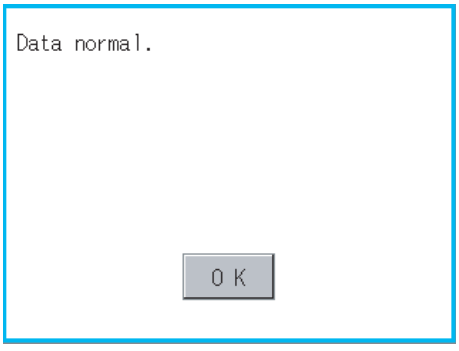
2. If touch ▲ ▼ button of the scrollbar, the screen scrolls up/down by one line.
If touch ⏫ ⏬ button, the screen scrolls up/down by one screen.

3. Touching ⊠ button returns the screen to the previous screen display.

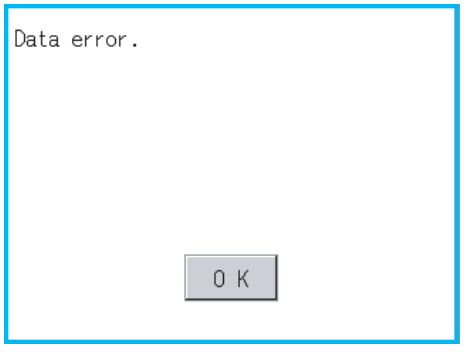
(5) Data check operation

Carries out data check of the selected system file.

Dialog at data check normal



Dialog at data check abnormal



1. Touch [Data check] button after selecting a data check target file.
The dialog box mentioned left will be displayed after executing data check.

2. Touching [OK] button closes the dialog box.

6.3.2 Project information

■ Functions of the project information

The project data files stored in each drive (A: standard CF card, B: Extended memory card, C: built-in flash memory, E: USB drive) can be displayed by lists.
In addition, the files can be downloaded, uploaded, deleted or copied, etc.

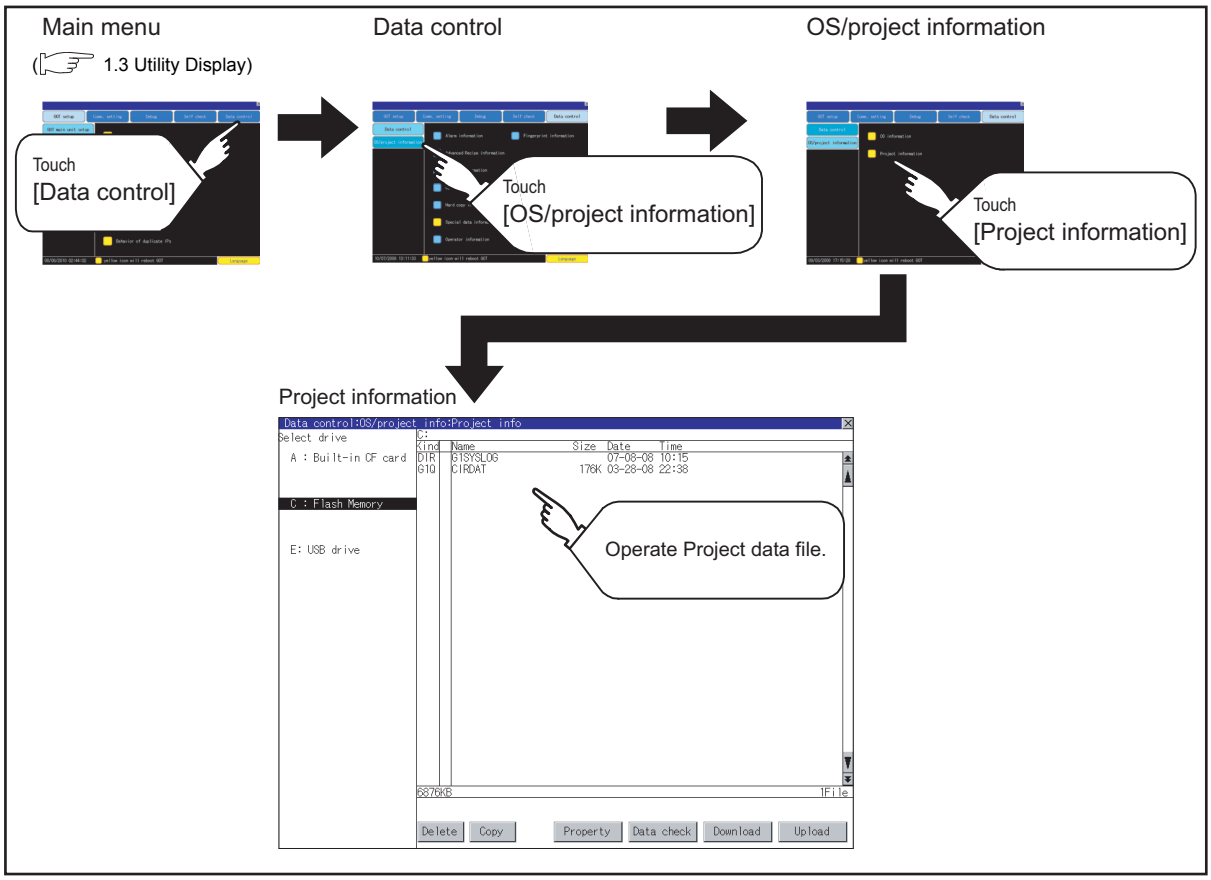
Function	Description	For GT Designer2	For GT Designer3	Reference
Information display of files and folders	Displays the kind, name, data size, the creation date and time of the file or folder.	○	○	■Display example of project information ■Operation of project information
Delete	Deletes project data.	○	○	(2) Delete operation
Copy	Copies project data. (can copy between the A drive, B drive, E drive or in each drive)	○	○	(3) Copy operation
Property display	Displays the project data creation date, author name and the version of GT Designer3 or GT Designer2.	○	○	(4) Property display operation
Data check	Data check of the file can be executed.	○	○	(5) Data check operation
Download	Downloads the project data written in the A drive (Standard CF card) / B drive (Extended memory card) / E drive (USB drive) to C drive (Built-in flash memory).	○	○	(6) Download operation/setup operation
Setup	The project data to be displayed can be selected.	○	○	(b) Setup operation
Upload	Uploads the project data written in the C drive (Built-in flash memory) to the A drive (Standard CF card) / B drive (Extended memory card) / E drive (USB drive).	○	○	(7) Upload/setup cancel operation
Setup cancel	Cancels the item which is selected for the project data to be displayed.	○	○	(b) Setup cancel operation

POINT

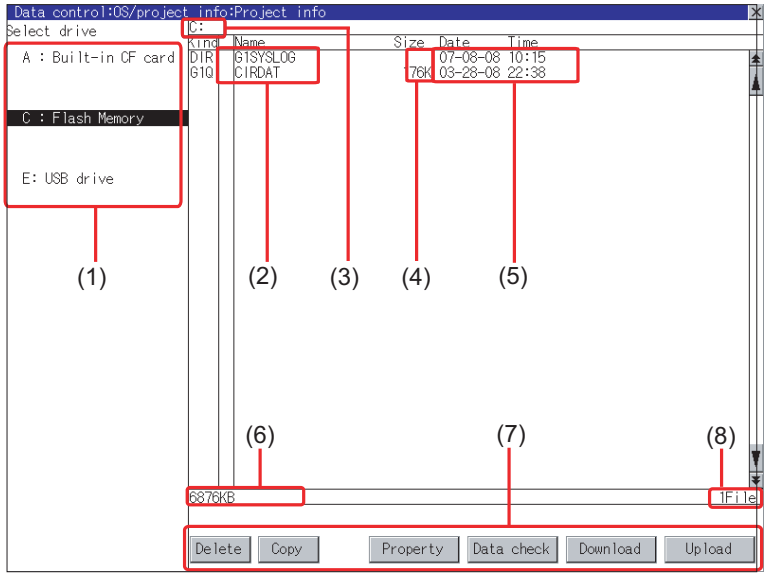
Precautions for operating project data

When the OS boot drive is set to [A: Standard CF Card], deleting, copying, downloading, setting up, and uploading project data are not available.

■ Display operation of project information



■ Display example of project information



Number	Item	Description
(1)	Select drive	The drive by which a file or folder is displayed can be selected. When the CF card is not connected, [A: Built-in CF card] and [B: Memory card] are not displayed. If the USB memory is not installed, [E: USB drive] is not displayed.
(2)	Name	The project data (Project Folder) in the selected drive is displayed. When the name exceeds 18 characters, the 19th and later characters are not displayed. The project data being monitored on the GOT is preceded by "*%".
(3)	Path name	Displays the path name of drive/folder which is currently displayed.
(4)	Size	Displays the size of the file displayed in Name.
(5)	Date and time	Displays the date and time when each file is installed.
(6)	The size of drive	Displays the size in use and the entire size of the drive which is selected by drive selection. (Only the size in use is displayed when selecting the C drive.)
(7)	Operation switch	Displays the execution switch of functions (download, upload, etc.) which can be carried out in [Project information].
(8)	Number of folders and files	Displays the total number of the displayed files and folders.

HINT

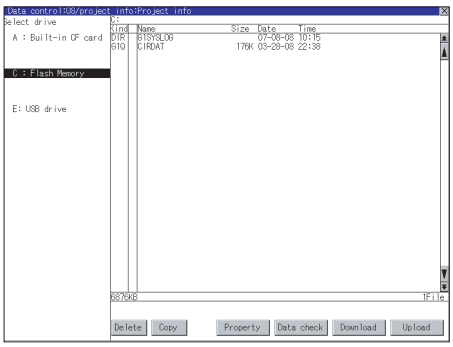
Displayed folders and files

For the folders and files displayed, refer to the following.

☞ 6.1.4 Display file

■ Operation of project information

(1) Display operation of project information



1. Touch the drive in Select drive. The project data in that drive will be displayed.
2. Touch the project data. It is then selected and highlighted.
3. Refer to the following for operation of delete, copy, property, data check, download, upload.

   Delete.....☞(2) Delete operation

   Copy.....☞(3) Copy operation

   Property.....☞(4) Property display operation

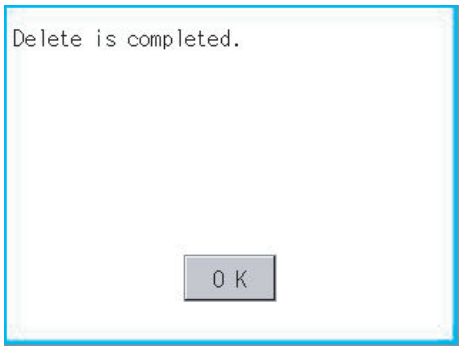
   Data check.....☞(5) Data check operation

   Download, setup .....☞(6) Download operation/ setup operation

   Upload, setup cancel .....☞(7) Upload/setup cancel operation
4. Touching ☒ button closes the screen.

(2) Delete operation

This operation deletes the selected file.



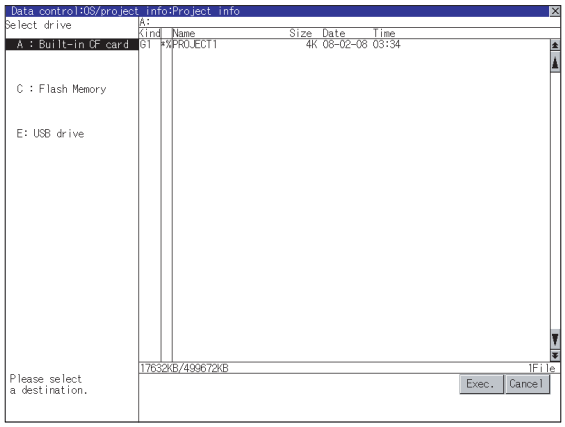
1. Touch and select the file to delete.
2. Screen mentioned left is displayed if [Delete] button is touched.
   Confirm the deletion targeted file is specified correctly.
   If touch [OK] button, the file is deleted.
   If touch [Cancel] button, the deletion is canceled.
3. When the deletion completes, the dialog box shown left is displayed.
   If touch [OK] button, the dialog box is closed.

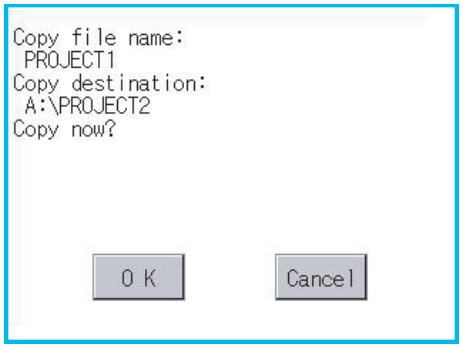
(3) Copy operation

Uploads the project data written in the C drive (Built-in flash memory) to the A drive (Standard CF card) / B drive (Extended memory card) / E drive (USB drive).

- Copying to another directory in the same drive
- Copying between A drive, B drive and E drive

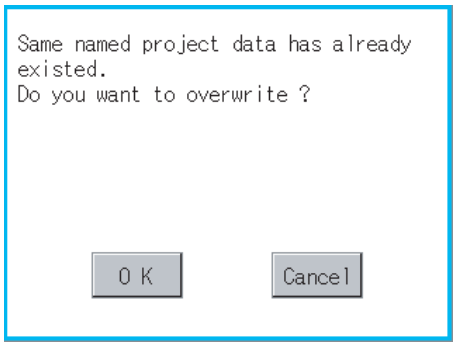
Copy to/from C drive is disabled.
(This item explains using the A drive.)

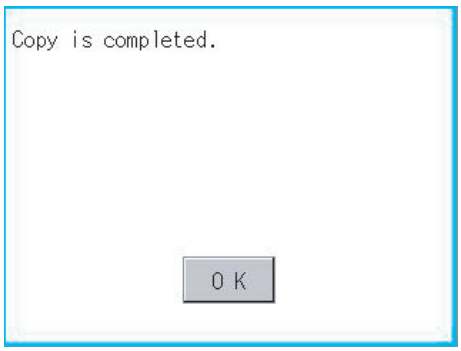




(Continued to next page)

1. Install CF card in the PC, in which create a folder for the copy destination.
   Set the same character with [System Information] of [Environmental Setting] of GT Designer3 or with [System Setting] of [System Environment] of GT Designer2 for the folder name.
   ☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
   (4.1 GOT Type Setting)
   •GT Designer2 Version□ Screen Design Manual
   (3.1 GOT/Controller Type Setting)
2. Install the CF card mentioned above to GOT.
   Refer to the following for inserting/ removing method of CF card.
   ☞ (Hardware)
   8.3.2 ■ CF card
   (Hardware)
   8.5.2 ■ Install USB peripheral devices
3. Open [Project Information] screen to select the file to copy.
4. If touch [Copy] button, the message [Please select a destination.] is displayed in the left bottom of the screen.
5. If the copy destination folder is touched, the screen display is changed to the folder of copy destination.
   At this time, it cannot be copied into the same folder where the file exists.
   Select other folders.
6. If touch [Exec] button, the dialog box mentioned left is displayed.



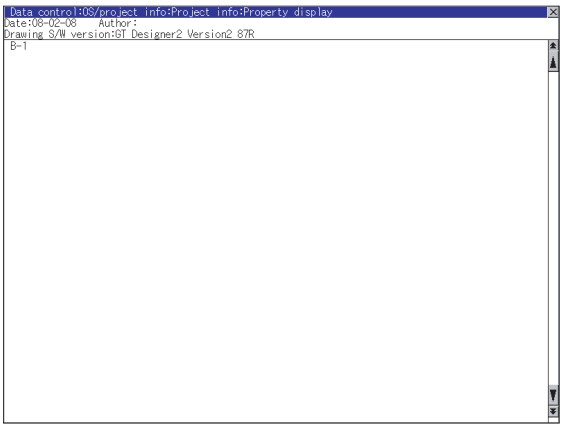


7. Touch [OK] button.
If there is no file of the same name in the copy destination folder, starts to copy.
When there is a file of the same name in the copy destination folder, the dialog box mentioned left is displayed without starting the copy.
If copy, in this case, the copied file is overwritten to the project data in the copy destination folder.
If touch [OK] button, starts to copy.
If touch [Cancel] button, cancels to copy.

8. When copying completes, the dialog box of completion is displayed.
If touch [OK] button, closes the dialog box.

(4) Property display operation

Displays the property of the project data in the selected folder.



1. If touch [Property] button after selecting the project data to display the property, the property is displayed as shown left.
In property display, the following information is displayed.

Item	Description
Date	Displays the creation date of the file.
Author	Displays the author of the project data.
Drawing S/W version	Displays name and version of the drawing software by which the project data is created.

2. If touch [▲] [▼] button, the screen scrolls up/down line by one line.

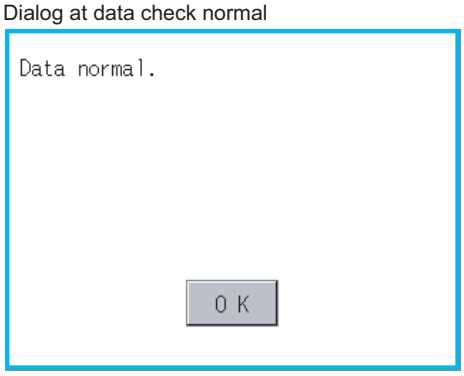
3. If touch [⏫] [⏬] button, the screen scrolls up/down by one screen.

4. If touch [⊠] button, the property display is closed and returned to the previous screen.

(5) Data check operation

Carrys out data check of the selected project file.

Dialog at data check normal



Dialog at data check abnormal

1. Touch the [Data check] button after selecting the file for data check.
   The data check is executed and the result is displayed by the dialog box shown left.
2. If touch [OK] button, the dialog box is closed.

(6) Download operation/setup operation

(a) Download operation

Transfers the project data stored in the A drive (Standard CF Card), B drive (Extended memory card) or E drive (USB drive) to the C drive (Built-in flash memory). (The GOT monitors using the data in the C drive.) (This item explains using the A drive.)

POINT

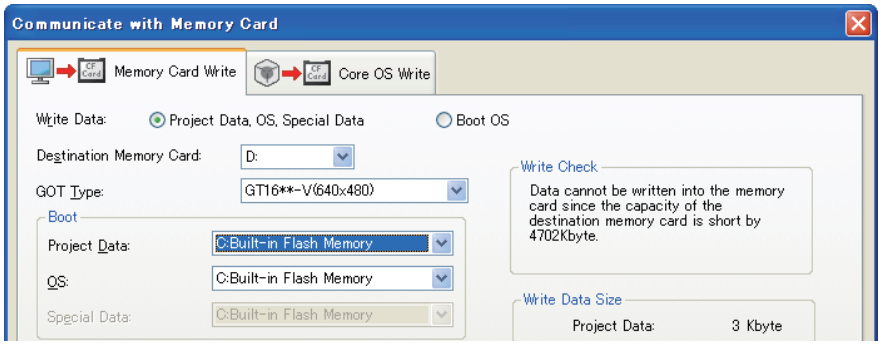
Before download operation

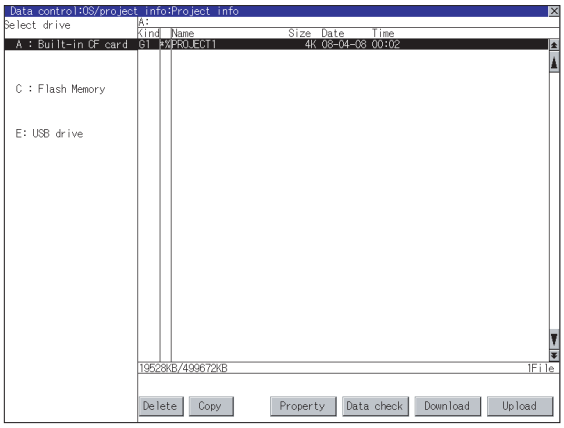
(1) Setup cancel

When the project data in the A drive or B drive is set up, the project data cannot be downloaded to the C drive. Execute setup cancel (☞ (7) (b) Setup cancel operation) before downloading the project data.

(2) Project data to be stored in a CF card

When storing the project data from GT Designer3 or GT Designer2 to CF card, select [C: Built-in flash memory] for [Project Data] in the [Boot Drive].



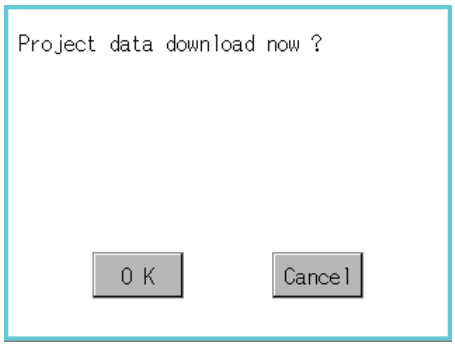


1. Install the CF card or USB memory in GOT.
Refer to the following for inserting/removing method of CF card.

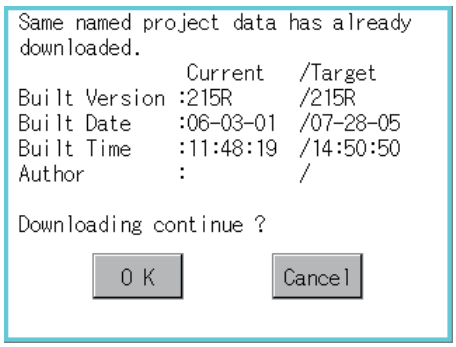
   (Hardware)
   8.3.2 ■ CF card

   (Hardware)
   8.5.2 ■ Install USB peripheral devices

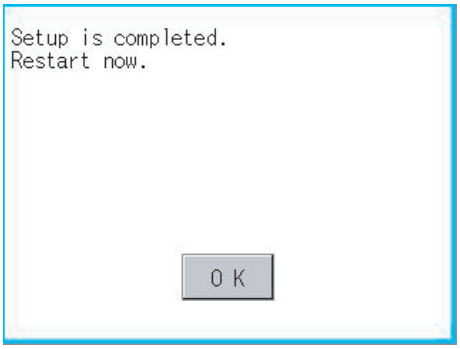
2. Touch [A: Standard CF Card] in Select drive



3. If touch the [Download] button, the dialog box mentioned left is displayed.
Touching the [OK] button executes downloading.



4. If any project data with the same name exists in the C drive, the screen shown left is displayed without starting downloading.
In this case, the project data of the C drive is overwritten with the project data of the A drive when downloaded.
Touching the [Cancel] button cancels the downloading.



5. When the downloading is completed, the dialog box mentioned left is displayed.
Touching the [OK] button restarts the GOT.

(b) Setup operation

Sets the project data stored in the A drive (Standard CF Card), B drive (Extended memory card) or E drive (USB drive) to be used in the GOT.

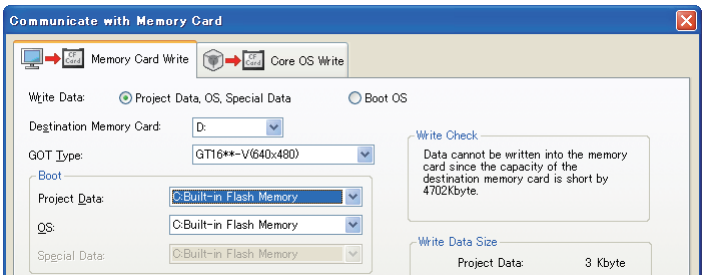
The GOT monitors using the monitor data in the A drive or B drive.

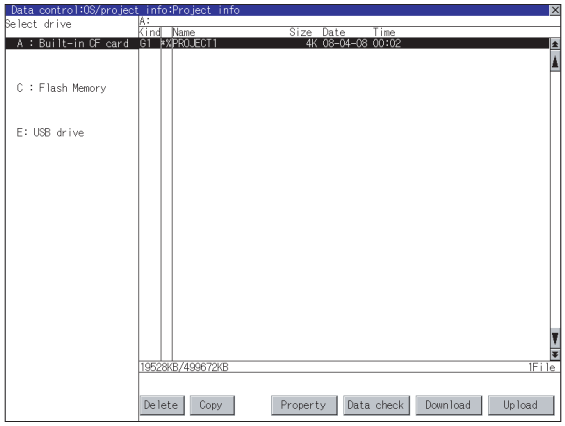
(This item explains using the A drive.)

POINT

Before setup operation

When storing project data from GT Designer3 or GT Designer2 to CF card, select [A: Standard CF Card], [B: Extended memory card] or [E: USB drive] for [Project Data] in [Boot Drive].



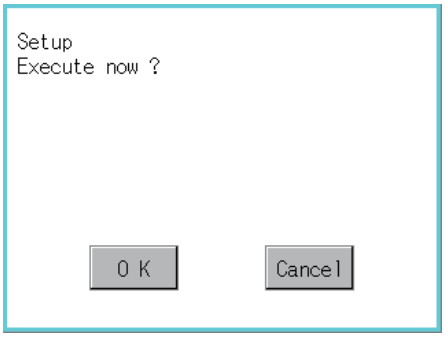


1. Install the CF card or USB memory in GOT. Refer to the following for inserting/removing method of CF card or USB memory.

   (Hardware) 8.3.2 ■ CF card

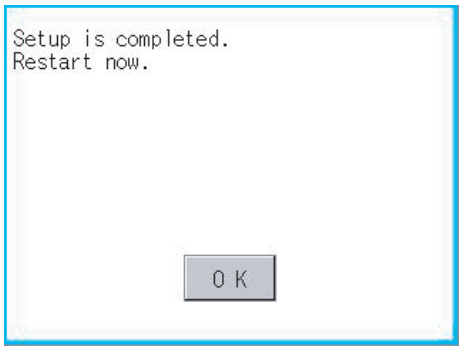
   (Hardware) 8.5.2 ■ Install USB peripheral devices

2. Touch [A: Standard CF Card] in Select drive.



3. If touch the [Download] button, the dialog box mentioned left is displayed.

   If touch [OK] button, the setup is executed.



4. When the setup is completed, the dialog box mentioned left is displayed.

   Touching the [OK] button restarts the GOT.

(7) Upload/setup cancel operation

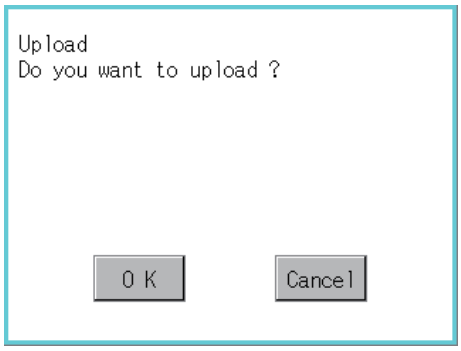
(a) Upload operation

By upload operation, the project data is transferred from the C drive (Built in flash memory) to the A drive (Standard CF card), B drive (Extended memory card) or E drive (USB drive).
The CF card or USB memory after uploading can be used for downloading project data to another GOT.
(This item explains using the A drive.)

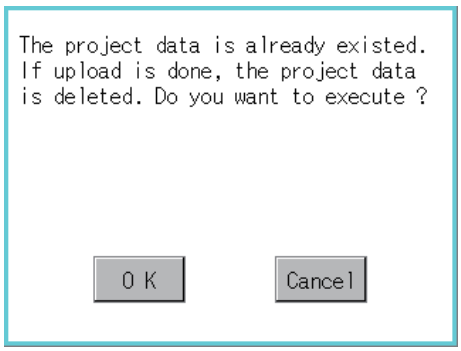
POINT

Before setup operation

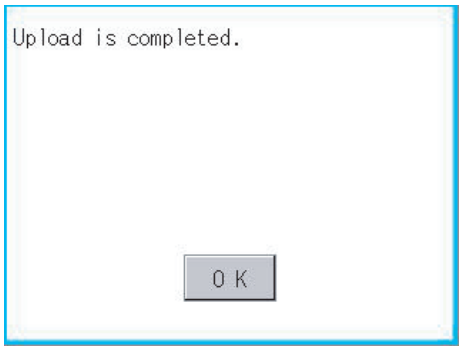
The project data cannot be uploaded to the A drive, B drive or E drive when the project data of the A drive, B drive or E drive is set up.
Execute setup cancel (☞ (7) (b) Setup cancel operation) before uploading the project data.



1. Touch [A: Standard CF Card] in Select drive.
2. If touch the [Upload] button, the screen mentioned left is displayed.
3. Touching the [OK] button executes uploading.

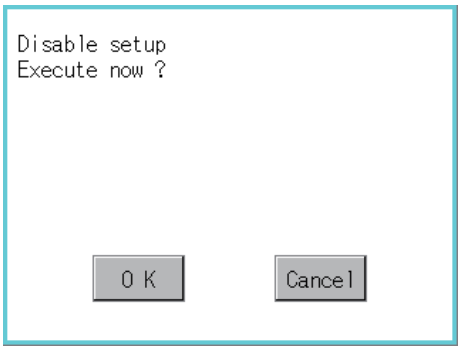


4. If any project data with the same name exists in the A drive, the screen shown left is displayed without starting uploading.
In this case, touching the [OK] button overwrites the project data of the A drive with the project data with the same name of the A drive.
Touching the [Cancel] button cancels uploading.

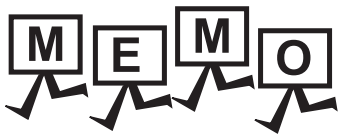


5. When the uploading is completed, the dialog box mentioned left is displayed.
Touching the [OK] button restarts the GOT.

(b) Setup cancel operation
By setup cancel, setup is canceled.
(This item explains using the A drive.)

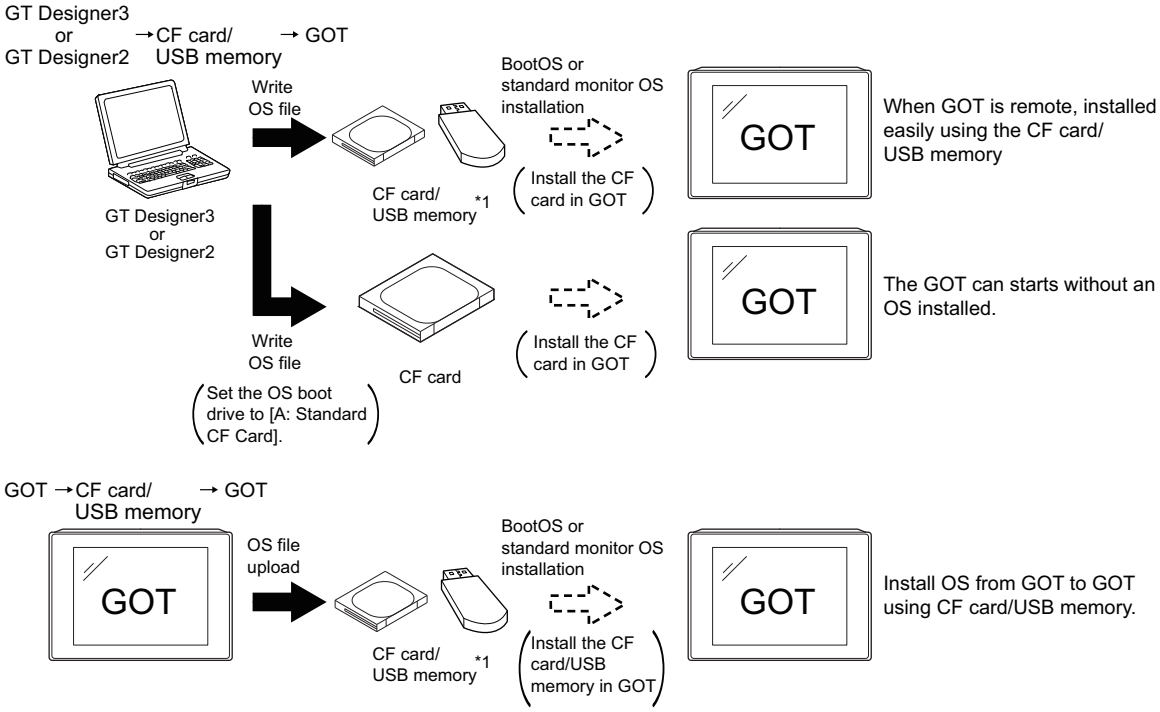


1. Touch [A: Standard CF Card] in Select drive.
2. If touch the [Upload] button, the screen mentioned left is displayed.
3. If touch the [OK] button, setup cancel is executed.
4. When the setup cancel is completed, the dialog box mentioned left is displayed. Touching the [OK] button restarts the GOT. After restart, the GOT monitors with the project data in the C drive.


MEMO

7. INSTALLATION OF COREOS, BOOTOS AND STANDARD MONITOR OS

For executing the GOT utility, install the BootOS and standard monitor OS on the C drive (built-in flash memory) of the GOT, or set the OS boot drive to [A: Standard CF Card] and insert the CF card with OS files into the GOT.
(BootOS is installed in the GOT at factory shipment. It is not necessary to install BootOS when upgrading of it is unnecessary.)
This chapter explains the installation using GOT.



*1 When execute installation with USB memory, standard monitor OS has to be installed in GOT in advance.

For details of the installation using GT Designer3 or GT Designer2, refer to the following.

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(7 COMMUNICATION WITH GOT)

•GT Designer2 Version ☐ Basic Operation/Data Transmission Manual

POINT

CoreOS

In 7.1 to 7.4 of this chapter, only BootOS and standard monitor OS are described.
For CoreOS, refer to the following.

☞ 7.5 CoreOS

7.1 BootOS and Standard Monitor OS Required for Installation

Under-mentioned BootOS and Standard monitor OS are necessary to execute utility.

<table>
<tr><th>OS name</th><th colspan="2">Function overview</th><th>Storage location</th></tr>
<tr><td>BootOS</td><td colspan="2">Requied for the control of GOT and the communication between PC and GOT.
Installed at factory shipment.
(BootOS can be installed from GT Designer3, GT Designer2 or the CF card. When installed from GT Designer3, GT Designer2 or the CF card, GOT is initialized to be the factory shipment status. Standard monitor OS must be pre-installed in the GOT when installing the BootOS again.)</td><td>Built-in flash memory
C: \G1BOOT\

CF card that stores data with the OS boot drive set to the A drive
A:\G1BOOT\</td></tr>
<tr><td rowspan="7">Standard monitor OS</td><td>Required for the GOT operation as the monitoring function of GOT, installation and deletion of the OS file or project data, touch key control or display function of the screen and guidance.</td><td rowspan="7">Required for display and operation of the user-created screen and utility screen.
Not installed in GOT at factory shipment.
Install it from GT Designer3, GT Designer2 or the CF card or USB memory.
At installation, select [Mincho] or [Gothic] for the 16-dot standard font.</td><td rowspan="7">Built-in flash memory
C:\G1SYS\

CF card that stores data with the OS boot drive set to the A drive
A:\G1SYS\</td></tr>
<tr><td>System screen data</td></tr>
<tr><td>System screen management information file</td></tr>
<tr><td>TrueType numerical font</td></tr>
<tr><td>12-dot standard font (Gothic)</td></tr>
<tr><td>16-dot standard font (Mincho)</td></tr>
<tr><td>16-dot standard font (Gothic)</td></tr>
</table>

7.2 Prior Preparations for Installing BootOS and Standard Monitor OS

For the installation using GOT, the CF card or USB memory storing BootOS or standard monitor OS is required.
For the method of writing BootOS and standard monitor OS in the CF card or USB memory, the following three methods are available.

(1) [To Memory Card] from GT Designer3 or GT Designer2

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(7.2 Transferring Data to Memory Card)
•GT Designer2 Version ☐ Basic Operation/Data Transfer Manual
(8.9 Transferring Data Using a Memory Card (PC → memory card → GOT))

(2) Uploading from other GOT (BootOS or standard monitor OS has been installed)

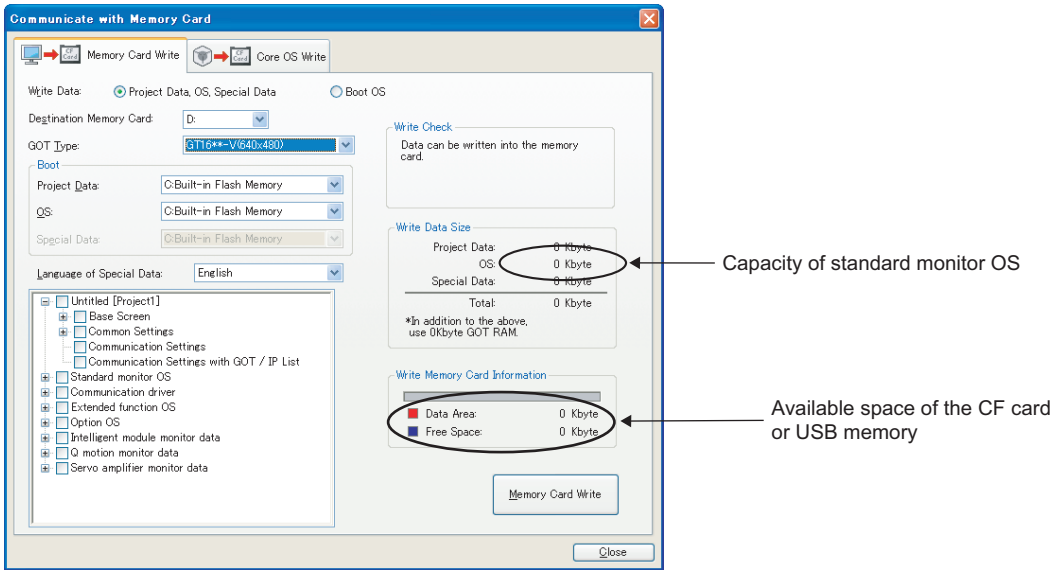
☞ 6. DATA CONTROL

(3) Using CF card that stores data with OS boot drive set to A drive

☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
•GT Designer2 Version ☐ Basic Operation/Data Transfer Manual

POINT

Precautions on writing BootOS, standard monitor OS in CF card or USB memory
When writing BootOS, standard monitor OS, etc. in the CF card or USB memory, be sure to execute by the utility of other GOT, GT Designer3 or GT Designer2.
The installation is not executed properly with the CF card or USB memory to which uploaded from the utility of GOT or copied by softwares other than GT Designer3 or GT Designer2.
Note the available capacity of the CF card or USB memory.
The available capacity of BootOS and standard monitor OS can be confirmed by [To Memory Card] of GT Designer3 or GT Designer2.



7.3 BootOS and Standard Monitor OS Installation Using CF Card or USB Memory

There are the following two types for the BootOS, standard monitor OS installation using the CF card or USB memory.

(1) Installing when starting the GOT

(☞ 7.3.1)

All the OS and project data stored in the CF card or USB memory are transferred to the GOT when powering on the GOT. This installing method is effective in the following cases.

- The GOT utility cannot be displayed.
- The standard monitor OS is not installed.

(2) Installing using the data control function (Utility)

(☞ 7.3.2)

By operating the utility, select OS or project data stored in the CF card or USB memory and transfer them to the GOT.

POINT

Precautions on installing BootOS, standard monitor OS

(1) Installing both BootOS and standard monitor OS

After completing BootOS installation, install standard monitor OS.
When installing BootOS, the built-in flash memory in the GOT is initialized and goes to the status at factory shipment. (All OS and project data are erased.)

BootOS is installed in the GOT at factory shipment. It is not necessary to install BootOS when not upgrading it.

(2) Copying project data using CF card or USB memory

After installing BootOS, standard monitor OS, and other OS, download the project data.
At this time, match the version of the standard monitor OS in the GOT with the version of the standard monitor OS with which the project data was created.

(3) When OS and project data are in the CF card or USB memory (when using GT Designer3 or GT Designer2)

For S.MODE switch-pressing installation, after the OS installation is complete, the project data is downloaded.
When installing with the utility, install the OS and download the project data from their respective operation screens.

(4) Installation cannot be interrupted.

Do not perform any of the following during a BootOS or standard monitor OS installation.
Failure to do so may result in installation failure, causing the GOT malfunction.

- Powering off the GOT
- Pressing the reset button of the GOT
- Turning off the CF card access switch of the GOT
- Removing the CF card or USB memory

If the installation failure and the GOT malfunction occur, take the following action.

- If BootOS installation failed
  Install CoreOS.

  (☞ 7.5.1 Installing the CoreOS)

- If standard monitor OS installation failed:
  Install BootOS.

  (☞ 7.3.1 Installing when starting the GOT)

7.3.1 Installing when starting the GOT

The displayed message is different depending on the installation condition of standard monitor OS. When the screen requesting operation is displayed, operate the GOT according to the instructions on the screen.

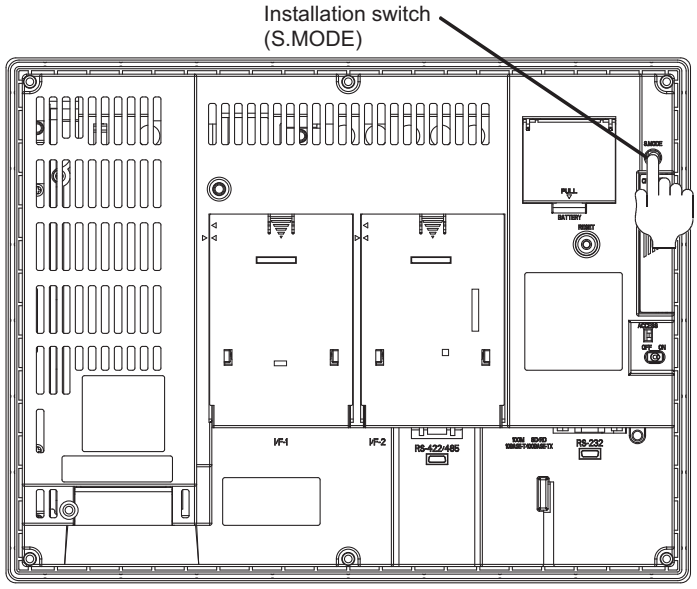
POINT

(1) Drives to be used
When installing OS at power-on, use the A or E drive.
The B drive cannot be used for OS installation at power-on.

(2) S.MODE switch-pressing installation function
When the CF card or USB memory that stores data with the OS boot drive set to the A drive is used, the S.MODE switch-pressing installation function is not available.

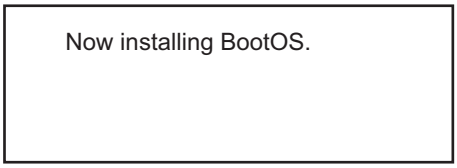
■ Operation procedure

The S.MODE switch is on the back of the GOT, as shown below.

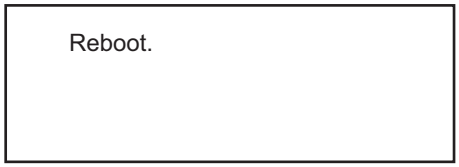


(1) When installing with CF card

1. Power OFF the GOT, switch the CF card access switch to OFF, and install the CF card where the BootOS, standard monitor OS or project data is stored in the CF card interface of the GOT.
2. Switch ON the CF card access switch of GOT.
3. Power on the GOT.
   Power on the GOT while pressing the install switch (S.MODE switch) on the back of the GOT. (1-point press installation function)
4. The BootOS or standard monitor OS is installed in the built-in flash memory.
   The CF card access LED is lit during the install execution.
   Do not pull out the CF card or power off the GOT while the CF card access LED is lit.



5. The GOT restarts automatically after the installation is completed.
(When the standard monitor OS is already installed, the GOT restarts by touching the [OK] button.)



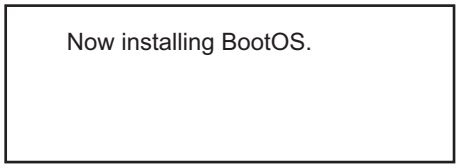
6. After confirming normal restart, switch off the CF card access switch of the GOT.
Confirm that the card access LED is not lit, and remove the CF card from the CF card interface of the GOT.

(2) When installing with USB memory

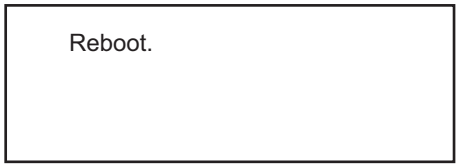
1. Power off the GOT, and install the USB memory where the BootOS, standard monitor OS or project data is stored in the USB interface of the GOT.
The BootOS cannot be stored in the USB memory where the standard monitor OS or project data is stored.

2. Power on the GOT.
Power on the GOT while pressing the install switch (S.MODE switch) on the back of the GOT.
(1-point press installation function)

3. The BootOS and standard monitor OS are installed in the built-in flash memory.
The USB memory access LED is lit during the installation execution.
Do not pull out the USB memory or power off the GOT while the USB memory access LED is lit.



4. The GOT restarts automatically after the installation is completed.
(When the standard monitor OS is already installed, the GOT restarts by touching the [OK] button.)



5. After confirming normal restart, confirm that the USB memory access LED is not lit, and remove the USB memory from the USB interface of the GOT.
For removing methods of the USB memory, refer to the following.

4.3.7 USB device status display

7.3.2 Installing using the data control function (Utility)

For details of data control function, refer to the following.

☞ 6. DATA CONTROL

POINT

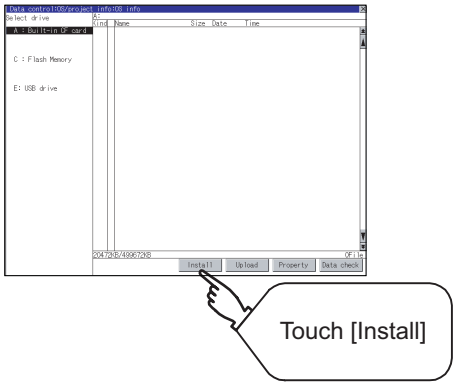
Precautions on executing data control function

When execute data control function, standard monitor OS has to be installed in GOT in advance. Thus, this function cannot be used for the initial installation of BootOS, standard monitor OS after purchasing GOT.
Install standard monitor OS by the following two methods.
(1) GT Designer3 or GT Designer2
(2) Installing when starting the GOT

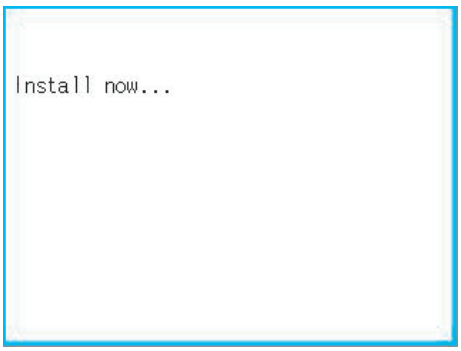
■ Operation procedure

(1) When installing with CF card

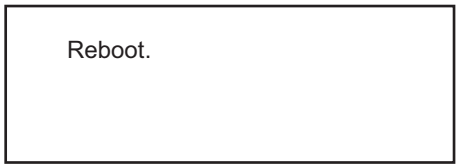
1. Power OFF the GOT. After CF card access LED is off, install the CF card in which BootOS, standard monitor OS or project data is stored in the CF card interface of GOT.
2. Switch ON the CF card access switch of GOT.
3. Display the data control function screen (Utility) on the GOT, and install BootOS, standard monitor OS from the CF card to GOT.



4. CF card access LED is lit during install execution.
Do not pull out the CF card or power OFF the GOT while the CF card access card is lit.



5. GOT restarts automatically after the installation is completed.

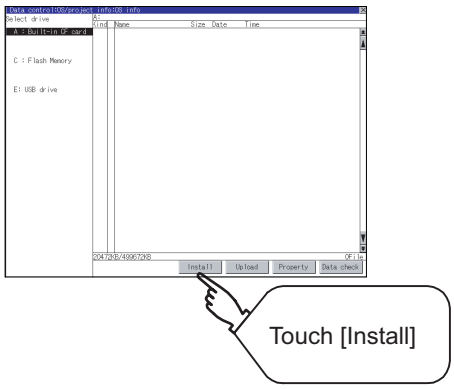


6. After confirming that GOT restarted normaly, switch OFF the CF card access switch of GOT. Confirm the CF card access LED is not lit, remove the CF card from the CF card interface of GOT.

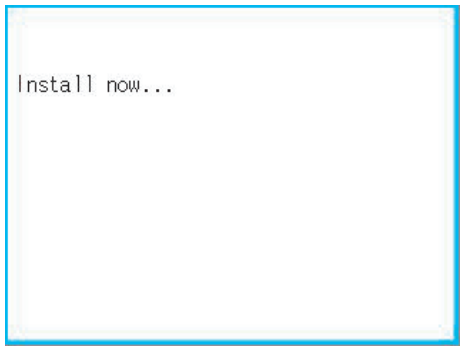
(2) When installing with USB memory

1. Install the USB memory in which BootOS, standard monitor OS or project data is stored in the CF card interface of GOT.

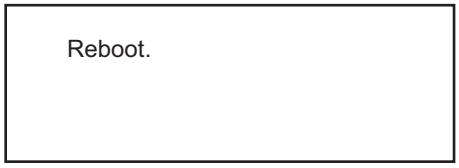
2. Display the data control function screen (Utility) on the GOT, and install BootOS, standard monitor OS from the USB drive to GOT.



3. The USB memory access LED is lit during install execution.
Do not pull out the CF card or power OFF the GOT while the USB memory access LED is lit.



4. GOT restarts automatically after installation is completed.



5. After confirming normal restart, confirm that the USB memory access LED is not lit.
Display the USB device status screen and remove the USB memory from the USB interface of GOT.

4.3.7 USB device status display

7.4 When Installing the Different Version of BootOS, Standard Monitor OS

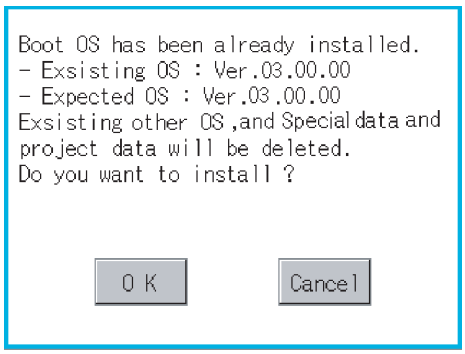
(1) BootOS installation

When installing BootOS, GOT compares the version of the BootOS to be installed with the version of BootOS which is already installed.
If the major version of BootOS to be installed is old, execute the following operations to prevent it from being rewritten.
(When installing from GT Designer3 or GT Designer2, a message is displayed on the personal computer screen. Follow the instructions in that message.)

(a) When only BootOS is stored in the CF card or USB memory
The message indicating disabled installation is displayed.

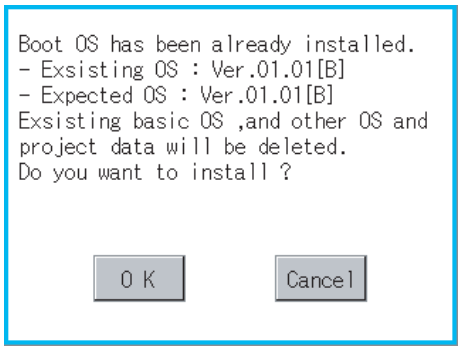
Touch the [OK] button to cancel installation.
After canceling installation, restart the GOT.

(b) When BootOS, standard monitor OS, and other OS are stored in the CF card or USB memory
Skip the BootOS installation and install standard monitor OS and other OS.
If the standard monitor OS is already stored on the GOT, the following message is displayed.



Touching the [OK] button executes installation.
Touching the [Cancel] button cancels installation.
After executing or canceling installation, restart the GOT.

(c) When the version is the same or newer regardless of the data stored in the CF card or USB memory (conditions (a) and (b) above)
The version information and a dialog for selecting whether or not to continue installation are displayed.



<GOT screen when BootOS is installed from CF card or USB memory.>

If touch [OK] button, installation is executed.
If touch [Cancel] button, installation is canceled.

(2) Standard monitor OS installation

Match the version of each OS file when installing standard monitor OS.
Standard monitor OS cannot be installed if the version of each OS file does not match.

When the installation process is discontinued.

Standard monitor OS	:	1.	O.	O
Communication driver	:	2.	O.	O
Optional function OS	:	2.	O.	O

Please match the number.

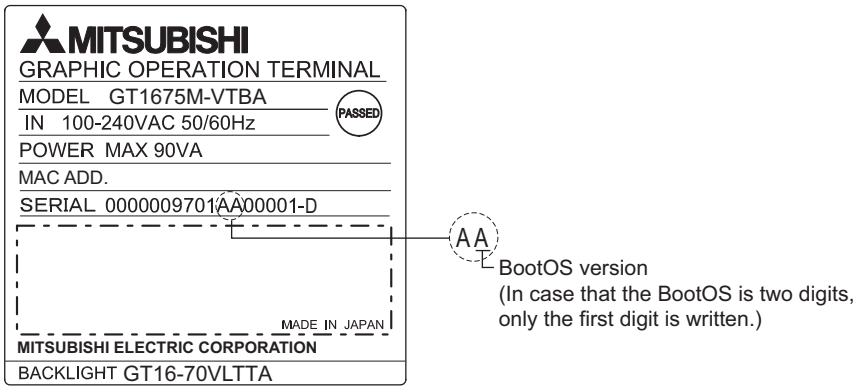
When the installation process is normally executed.

Standard monitor OS	:	2.	O.	O
Communication driver	:	2.	O.	O
Optional function OS	:	2.	O.	O

POINT

Checking method of BootOS, standard monitor OS version

1. Check the version of BootOS or standard monitor OS installed in GOT at [OS information] of the utility.
Refer to the following for details.
6.3.1 OS information
2. Check the version of BootOS installed in GOT at product shipment on the rating plate on GOT rear face.



7.5 CoreOS

Install CoreOS only when the GOT will not be the status of factory shipment even when BootOS is installed.
Normally, the CoreOS has not to be installed.

POINT

Precautions for installing CoreOS

When executing the CoreOS installation once, it cannot be canceled on the way.

Do not attempt the followings to cancel the installation on the way.

The GOT may not operate.

- Powering the GOT off.
- Pressing the GOT reset button.
  If the GOT does not operate, please consult your local Mitsubishi (Electric System) Service center or representative.

If the GOT does not recover even when installing the CoreOS, the error may be caused by a hardware failure.
Please consult your local Mitsubishi (Electric System) Service center or representative.

7.5.1 Installing the CoreOS

■ Before installing the CoreOS

(1) Installing procedure

The CoreOS can be installed only when using a CF card.
Installation via USB memory/USB/RS-232/Ethernet is not available.

(2) CF card to be used

CF card of 32MB or more is required.

(3) Boot OS

When installing the CoreOS, the latest BootOS is also installed automatically.
(Operation by the user is not required.)

(4) When installing the CoreOS

When installing the CoreOS, remove all the extension units installed in the extend I/F.
For installing methods of the extension unit, refer to the following.

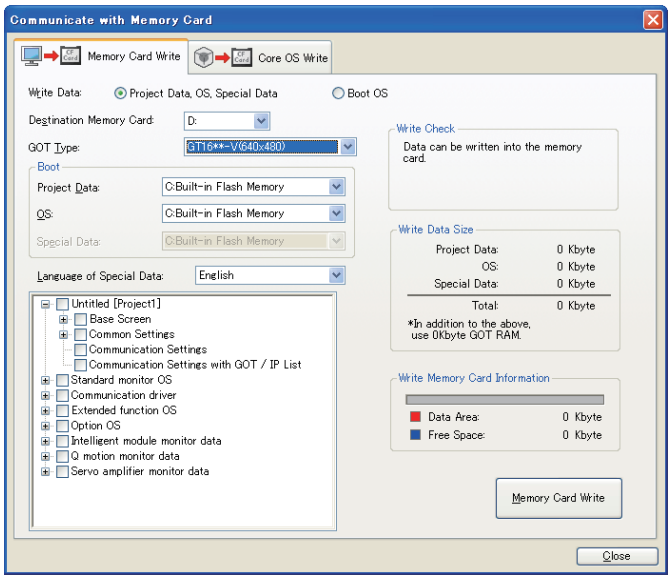
(Hardware) 8. OPTION

Installing the CoreOS

1. Write the CoreOS from GT Designer3 or GT Designer2 to the CF card.
For details of GT Designer3 or GT Designer2 operation, refer to the following manual.

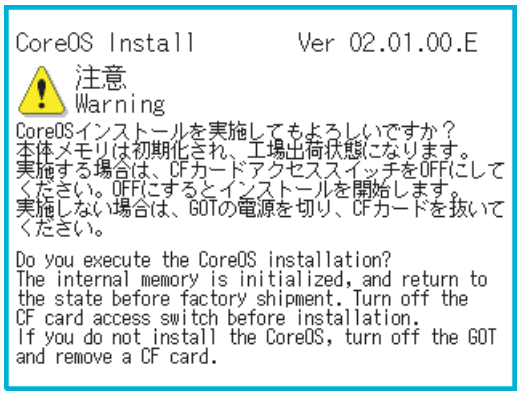
☞ •GT Designer3 Version1 Screen Design Manual (Fundamentals)
(7 COMMUNICATION WITH GOT)

•GT Designer2 Version□ Basic Operation/Data Transfer Manual
(8. TRANSFERRING DATA)

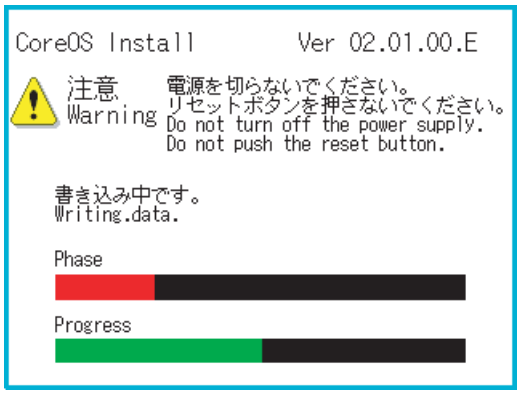


2. After confirming that the GOT is powered off, install the CF card in the GOT.
After installing, switch the CF card access switch on.

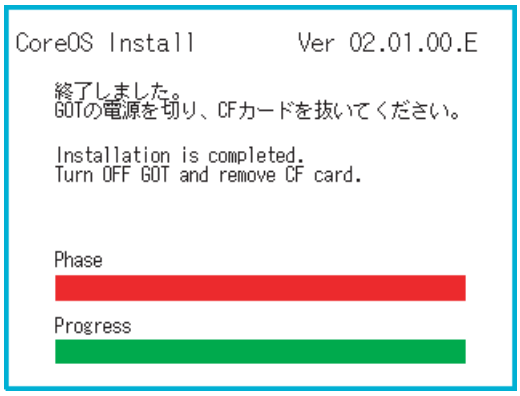
3. Powering the GOT on displays the following screen.
To cancel the installation, power the GOT off and remove the CF card.



4. Turning the CF card access switch off executes Core OS installation.



5. When the installation is completed, the dialog as shown below is displayed.
(The POWER LED of the GOT blinks (green/orange) at the installation completion.)
Confirm that the message is displayed and power the GOT off.



6. Remove the CF card after powering the GOT off.

7. Powering the GOT on again displays the screen as shown below.
(The GOT goes to the status of factory shipment.)
Install OS (Standard monitor OS, communication driver, etc.) or download project data as required.
For how to install each OS or download project data, refer to the following manual.

•GT Designer3 Version1 Screen Design Manual (Fundamentals)
(7 COMMUNICATION WITH GOT)
•GT Designer2 Version□ Basic Operation/Data Transfer Manual
(8. TRANSFERRING DATA)

7.5.2 When the CoreOS cannot be installed

When the CoreOS cannot be installed, confirm the following item.
If the CoreOS cannot be installed even after checking the following item, the error may be caused by a hardware failure. Please consult your local Mitsubishi (Electric System) Service center or representative.

Error		Action
The CoreOS installation is not executed even when installing the CF card in the GOT.		(1)Check whether the CF card access switch of the GOT is on. If the switch is off, switch it on. (2)The writing from the GT Designer3 or GT Designer2 to the CF card may not have been completed normally. Execute the writing from the GT Designer3 or GT Designer2 to the CF card again.
The message is displayed on the GOT	GOT error. Contact your local sales office.	The GOT main unit is broken. Please consult your local Mitsubishi (Electric System) Service center or representative.
	CF card error. Installation will be cancelled. Check whether the CF card can be used.	The CF card is defective. (1) Format the CF card and re-execute. (2) Replace the CF card.
	Optional unit has been connected to extension I/F slot. The optional unit should be removed before starting installation. Installation will be canceled.	Remove the extension unit installed on the GOT.
	GOT type and OS version do not match. Installation will be canceled.	The GOT type selected at [Core OS write] of the GT Designer3 or GT Designer2 is not correct. Confirm the GOT type and perform [Core OS write] again.
	The version of OS is not acceptable to this GOT. Installation will be canceled. Confirm the version of OS.	Install CoreOS from the latest GT Designer3 or GT Designer2.
	Memory card access switch is off. Turn on the switch and restart the GOT. Installation will be canceled.	The CF card access switch is off. Turn the switch on and restart the GOT.

APPENDICES

Appendix1 Usage Condition of Utility Function

The function which can be used differs according to the GOT type.
When the standard monitor OS is written from GT Designer3 of an old version or GT Designer2, some functions may not be used.
Writing the standard monitor OS from GT Designer3 of the latest version is recommended.

○ : Applicable × : Not applicable — : Not required

Item			Functions overview	GT16	GT15	GT SoftGOT 1000	GT11	Refe-rence
GOT setup	GOT main unit setup	Time setting	Selecting a base clock	○	○	—	○	○
			Displaying and setting the clock current time	○	○	—	○	×
			Displaying the battery status	○	○	—	○	×
		Transparent mode settings	Setting the channel No. to be used for the communication for the FA transparent function	○	○	—	×	○
		Clean	Displaying the screen for cleaning the display	○	○	×	○	×
		Video/RGB Setting	Setting the video display and RGB display	○ *9	○ *6	—	×	○
		Multimideia setting	Displaying the screen for setting the multimedia	○ *9	×	—	×	○
		License management	Displaying/setting the license	○	×	×	×	×
		Behavior of duplicate IPs	Setting the GOT operation when a device with the same IP address as that of the GOT is added to the network afterwards.	○	○	×	×	×
	Display		Switching message languages	○	○	○	○ *2	○
			Setting the startup screen display time and screen saving time	○	○	○ *1	○	○
			Setting the backlight to ON or OFF during screen saving	○	○	—	○	○
			Setting the battery alarm display to ON or OFF	○	○	—	○	×
			Setting the detect level/detect time of human sensor	○ *11	○ *3	×	×	×
			Adjusting brightness and contrast	○	○	×	○	×
	Operation		Setting the buzzer volume and window move buzzer	○	○	○	○	○
			Setting the key sensitivity and key reaction speed	○	○	—	○	×
			Setting the touch detection mode	○	○ *4	×	×	×
			Changing security levels	○	○	○	○	×
			Setting the utility call keys	○	○	○	○	○
			Adjusting the touch panel	○	○ *4	—	○	×
			Setting the USB mouse/keyboard	○	×	×	×	○
			Setting the SoftGOT-GOT link function	○	○	×	×	○
			Setting the VNC® server function	○	×	×	×	×

(Continued to next page)

○ : Applicable ×: Not applicable — : Not required

Item			Functions overview	GT16	GT15	GT SoftGOT 1000	GT11	Refe-rence
GOT setup	GOT maintenance	Maintenance timing setting	Setting the maintenance notification times for the backlight and display Setting the number of maintenance notifications for touch keys and the built-in flash memory	○	○	—	×	×
		Addition times reset	Resetting accumulated hours and counts for maintenance time notifications	○	○	—	×	×
		GOT start time	Displaying the GOT start date and time, current time, and accumulated operating hours	○	○	×	○	×
		GOT information	Displaying the GOT information	○	×	×	×	—
Communication setting	Communi-cation setting	Communi-cation setting	Assigning channel numbers and communication drivers to communication interfaces.	○	○	×	○	○
			Setting communication parameters	○	○	×	○	○
			Setting or deleting sequence program protection key words, canceling sequence program protection status (When connecting to FX series CPU)	○	○	×	○	×
		Ethernet setting	Displaying the contents of Ethernet setting, changing the host	○	○	×	×	○
Debug	Monitor screens1	System monitor	Starting the system monitor	○	○	×	○	×
		Ladder monitor	Starting the ladder monitor	○	○ *5	×	×	×
		Network monitor	Starting the network monitor	○	○	×	×	×
		Intelligent module monitor	Starting the intelligent module monitor	○	○ *5	×	×	×
		Servo amplifier monitor	Starting the servo amplifier monitor	○	○	×	×	×
		Motion monitor	Starting the motion monitor	○	○	×	×	×
		CNC monitor	Starting the CNC monitor	○ *9	○ *8	×	×	×
		FX list editor	Starting the FX list editor	○	○	×	○	×
		A List editor	Starting the A list editor	○	○	×	○	×
		SFC Monitor	Starting the SFC monitor	○	○ *5	×	×	×
		Ladder editor	Starting the ladder edit	○ *12	○ *10	×	×	×
		MELSEC-L troubleshooting	Starting the MELSEC-L troubleshooting	○	×	×	×	×
		Motion SFC monitor	Starting the motion SFC monitor	○	×	×	×	×
		Log viewer	Starting the log viewer	○	×	×	×	×
	Monitor screens2	Motion program (SV43) editor	Starting the motion program (SV43) editor	○ *9	×	×	×	×
Debug	Debug setting	Q/L/QnA ladder monitor	Setting the data storage location for the MELSEC-Q/L/QnA ladder monitor function.	○	○ *5	—	×	○
		Backup/ restoration setting	Setting the storage locations for backup data and backup settings, setting the maximum number of backup data, and setting whether to specify the backup CPU No. or not	○	○	—	×	○
			Trigger backup setting					

(Continued to next page)

○ : Applicable ✕ : Not applicable — : Not required

Item			Functions overview	GT16	GT15	GT SoftGOT 1000	GT11	Refe-rence
Debug	Memory/ data control	Backup/ restoration	Excuting the backup/restoration function	○	○	—	✕	○
		GOT data package acquisition	Copying the OS, special data, and project data to a CF card or USB memory*7	○	○	✕	✕	✕
		CNC data I/O	Starting the CNC data I/O function	○ *9	○ *8	—	✕	○
		Memory card format	Formatting a CF card or USB memory*7	○	○	✕	○	✕
		Memory information	Displaying the available memory of the GOT	○	○	✕	○	✕
		USB device status display	USB device status display	○	✕	✕	✕	✕
		SRAM control	Confirming the SRAM user area usage, backing up or restoring the data in the SRAM user area, and initializing the SRAM user area	○	✕	✕	✕	✕
		Motion program (SV43) editor	Starting the motion program (SV43) I/O	○ *9	✕	✕	✕	✕
Self check	Diagnostic functions	System alarm	Displaying the system alarm	○	○	✕	○	✕
		Memory check	Write/read check of the CF card or USB memory and built-in flash memory.	○	○	✕	○	✕
		Drawing check	Checking the drawing	○	○	✕	○	✕
		Font check	Checking the font	○	○	✕	○	✕
		Touch panel check	Checking the touch panel	○	○	✕	○	✕
		I/O check	Checking the I/O of RS-232 interface	○	○	✕	○	✕
		Network status display	Displaying the network status	○	○	—	○	✕
		Ethernet status check	Checking the connection status of Ethernet	○	✕	✕	✕	✕
	Batch self check		Executing various diagnostics collectively and copying the result to a CF card or USB memory	○	✕	✕	✕	✕
Data control	Data control	Alarm information	Deleting or copying alarm log files	○	○	✕	○	✕
			Converting alarm log files in G1A format → CSV/TXT format	○	○	✕	✕	✕
			Displaying graphs of alarm log files	○	○	✕	✕	✕
		Advanced Recipe information	Converting advanced recipe files in G1P format → CSV/TXT format Deleting/copying/moving advanced recipe files, creating a new advanced recipe file Deleting or moving advanced recipe folders, changing advanced recipe folder names, creating a new advanced recipe folder Writing/reading/matching record data and deleting device values with the advanced recipe record list	○	○	✕	✕	✕

(Continued to next page)

○: Applicable ×: Not applicable —: Not required

Item			Functions overview	GT16	GT15	GT SoftGOT 1000	GT11	Refe-rence
Data contro	Data control	Logging information	Converting logging files in G1L format → CSV/TXT format	○	○	×	×	×
			Deleting/copying/moving logging files, changing logging file names Deleting logging folders, creating a new logging folder	○	○	×	×	×
		Operation log information	Converting operation log files in G1O format → CSV/TXT format	○	○	○	×	○
			Deleting/copying/moving operation log files, changing operation log file names Deleting operation log folders, creating a new operation log folder	○	○	○	×	×
		Hard copy information	Deleting/copying hard copy files, changing hard copy file names	○	○	×	×	×
		Special data information	Deleting or checking special data files, Deleting special data folders, downloading special data stored in the CF card/USB memory*7 to the C drive (Built-in flash memory)	○	○	×	×	×
		Operator information	Adding/editing/deleting/importing/exporting operator information, changing passwords, setting the automatic logout time, password expiration date and external authentication ID	○	○	○	×	×
		Fingerprint information	Adding/deleting fingerprint information	○	○	×	×	×
	OS/project information	OS information	Installing or uploading OS, displaying OS property, checking OS data	○	○	×	○	×
		Project Information	Downloading/uploading/deleting/copying project files, displaying project file property, checking project file data	○	○	×	○	×

*1: The screen saving time cannot be set.
*2: The following display and operations are not allowed with the GT11.
• Chinese (Traditional) cannot be displayed.
• Japanese and Chinese (Simplified) cannot be selected on the GOT screen.
(Japanese and Chinese (Simplified) fonts cannot be installed at the same time.)
*3: Applicable to only GT1595-X, GT1585V-S and GT1585-S.
*4: Applicable to only GT1595-X.
*5: Inapplicable to GT1555-Q and GT1550-Q.
*6: Applicable to only GT1585V-S and GT1575V-S.
*7: Available for only GT16.
*8: Applicable to only GT1595-X, GT1585V-S, GT1585-S, GT1575V-S and GT1575-S.
*9: Applicable to only GT1695M-X, GT1685M-S, GT1675M-S and GT1665M-S.
*10: Inapplicable to GT1555-V, GT1555-Q and GT1550-Q.
*11: Applicable to only GT1695M-X and GT1685M-S.
*12: GT1655-V cannot be used.

Appendix2 How to Choose Drive

For using a CF card, select the A or B drive according to the following.

(1) A drive

The CF card interface built in the GOT is used as the A drive.

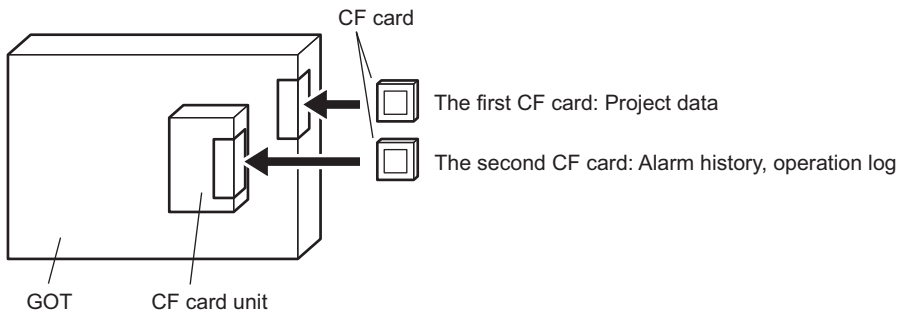
(2) B drive

The following two units can be used as the B drive.

- CF card unit
  When an additional drive is used, use the CF card unit as the B drive of the GOT.
- CF card extension unit
  When an additional drive is used, use the CF card extension unit as the B drive of the GOT.
  Use the unit when a CF card interface is needed on the control panel.

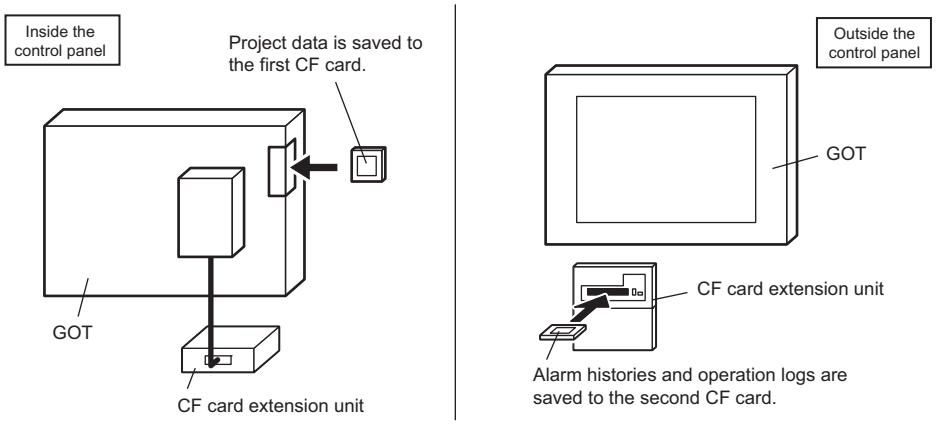
■ Example of how to use CF card unit

Infrequently used data, including project data, are saved to a CF card, and frequently used data, including alarm histories and operation logs, are saved to another CF card. The data can be saved in each CF card.



■ Example of how to use CF card extension unit

The CF card extension unit can be used in the same way as the above "Example of how to use CF card unit".
For using the CF card extension unit, there is no need to open the control panel's door when a CF card is inserted or ejected.



Appendix3 List of Functions Added by GT Designer2 Version Upgrade (For GOT1000 Series)

For the functions added by version upgrade of the GT Designer2, refer to the following.

☞ GT Designer2 Version 2 Screen Design Manual

For the functions added by the version upgrade of GT Works3, contact your local distributor.

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REVISIONS

For the software functions, refer to the product-specific screen design manual.

The manual number is given on the bottom left of the back cover.

Print Date	Manual Number	Revision
May, 2010	SH(NA)-080929ENG-A	First edition
Jun., 2010	SH(NA)-080929ENG-B	Compatible with GT Works3 Version 1.17T • GT1675-VN, GT1672-VN, and GT1662-VN supported • SRAM control supported • Converting a CSV file or Unicode text file to an advanced recipe file (G1P file) enabled
Oct., 2010	SH(NA)-080929ENG-C	Compatible with GT Works3 Version 1.19V • Compatible with switching the display order of operation logs on the operation log information screen. • Compatible with Behavior of duplicate IPs.
Jan., 2011	SH(NA)-080929ENG-D	Compatible with GT Works3 Version 1.23Z • The [OK] button is changed to the [OK]/[Cancel] buttons • Compatible with "no setting" of the utility call key • Compatible with the setting of [Operating priority guaranteed time]/[Operation status popup notification] in the [SoftGOT-GOT link] screen • Compatible with the display of GOT information • Compatible with the Ethernet settings check and the change of the host • Compatible with the setting of [Comment setting] in the [Q/L/QnA ladder monitor] screen • Compatible with the Ethernet connection status check with the ping transmission • Compatible with the display of GOT start time history in Batch self check • Compatible with the latest display in Operation log information
Apr., 2011	SH(NA)-080929ENG-E	Compatible with GT Works3 Version 1.28E • Compatible with GT1655-V • Compatible with the specification change of the numeric keyboard
Jul., 2011	SH(NA)-080929ENG-F	Compatible with GT Works3 Version 1.31H • CC-Link IE Field Network supported • Motion program (SV43) editor supported • [Setting to save ladders] for the Q/L/QnA ladder monitor supported
Oct., 2011	SH(NA)-080929ENG-G	Compatible with GT Works3 Version 1.37P • Motion program (SV43) I/O supported • VNC® server function supported
Jan., 2012	SH(NA)-080929ENG-H	Compatible with GT Works3 Version1.40S • Compatible with the long time recording setting in the multimedia function

Print Date	Manual Number	Revision
Apr., 2012	SH(NA)-080929ENG-I	Compatible with GT Works3 Version1.45X • The backup/restore function supports the backup CPU No. setting. • The multimedia function supports displaying the file name and the shooting time of the video being played. • Items of [Size], [Date], and [Time] are added to the file menu display screen for the multimedia function.
Jun., 2012	SH(NA)-080929ENG-J	Compatible with GT Works3 Version1.54G • The company name of Yamatake Corporation is changed to Azbil Corporation. • For the drawing check function, gray is added to the color displayed at the missing bit check and the color check.
Nov., 2012	SH(NA)-080929ENG-K	SAFETY PRECAUTIONS changed

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WARRANTY

Please confirm the following product warranty details before using this product.

1. Gratis Warranty Term and Gratis Warranty Range

If any faults or defects (hereinafter "Failure") found to be the responsibility of Mitsubishi occurs during use of the product within the gratis warranty term, the product shall be repaired at no cost via the sales representative or Mitsubishi Service Company.
However, if repairs are required onsite at domestic or overseas location, expenses to send an engineer will be solely at the customer's discretion. Mitsubishi shall not be held responsible for any re-commissioning, maintenance, or testing on-site that involves replacement of the failed module.

[Gratis Warranty Term]

The gratis warranty term of the product shall be for thirty-six (36) months after the date of purchase or delivery to a designated place.
Note that after manufacture and shipment from Mitsubishi, the maximum distribution period shall be six (6) months, and the longest gratis warranty term after manufacturing shall be forty-two (42) months. The gratis warranty term of repair parts shall not exceed the gratis warranty term before repairs.

[Gratis Warranty Range]

(1) The customer shall be responsible for the primary failure diagnosis unless otherwise specified.
If requested by the customer, Mitsubishi Electric Corporation or its representative firm may carry out the primary failure diagnosis at the customer's expence.
The primary failure diagnosis will, however, be free of charge should the cause of failure be attributable to Mitsubishi Electric Corporation.

(2) The range shall be limited to normal use within the usage state, usage methods and usage environment, etc., which follow the conditions and precautions, etc., given in the instruction manual, user's manual and caution labels on the product.

(3) Even within the gratis warranty term, repairs shall be charged for in the following cases.
1. Failure occurring from inappropriate storage or handling, carelessness or negligence by the user. Failure caused by the user's hardware or software design.
2. Failure caused by unapproved modifications, etc., to the product by the user.
3. When the Mitsubishi product is assembled into a user's device, Failure that could have been avoided if functions or structures, judged as necessary in the legal safety measures the user's device is subject to or as necessary by industry standards, had been provided.
4. Failure that could have been avoided if consumable parts designated in the instruction manual had been correctly serviced or replaced.
5. Replacing consumable parts such as the battery, backlight and fuses.
6. Failure caused by external irresistible forces such as fires or abnormal voltages, and Failure caused by force majeure such as earthquakes, lightning, wind and water damage.
7. Failure caused by reasons unpredictable by scientific technology standards at time of shipment from Mitsubishi.
8. Any other failure found not to be the responsibility of Mitsubishi or that admitted not to be so by the user.

2. Onerous repair term after discontinuation of production

(1) Mitsubishi shall accept onerous product repairs for seven (7) years after production of the product is discontinued.
Discontinuation of production shall be notified with Mitsubishi Technical Bulletins, etc.

(2) Product supply (including repair parts) is not available after production is discontinued.

3. Overseas service

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5. Changes in product specifications

The specifications given in the catalogs, manuals or technical documents are subject to change without prior notice.

6. Product application

(1) In using the Mitsubishi graphic operation terminal, the usage conditions shall be that the application will not lead to a major accident even if any problem or fault should occur in the graphic operation terminal device, and that backup and fail-safe functions are systematically provided outside of the device for any problem or fault.

(2) The Mitsubishi graphic operation terminal has been designed and manufactured for applications in general industries, etc.
Thus, applications in which the public could be affected such as in nuclear power plants and other power plants operated by respective power companies, and applications in which a special quality assurance system is required, such as for Railway companies or Public service purposes shall be excluded from the graphic operation terminal applications.
In addition, applications in which human life or property that could be greatly affected, such as in aircraft, medical applications, incineration and fuel devices, manned transportation equipment for recreation and amusement, and safety devices, shall also be excluded from the graphic operation terminal range of applications.
However, in certain cases, some applications may be possible, providing the user consults the local Mitsubishi representative outlining the special requirements of the project, and providing that all parties concerned agree to the special circumstances, solely at our discretion.
In some of three cases, however, Mitsubishi Electric Corporation may consider the possibility of an application, provided that the customer notifies Mitsubishi Electric Corporation of the intention, the application is clearly defined and any special quality is not required.

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SH(NA)-080929ENG-K

GRAPHIC OPERATION TERMINAL

GOT1000

GT16 User's Manual (Basic Utility)

MODEL	GT16-U(UTILITY)-E
MODEL CODE	1D7MD4
SH(NA)-080929ENG-K(1211)MEE	

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